



STIC Search Report

Biotech-Chem Library

STIC Database Tracking Number: 123456789

TO: Minh-Tam Davis
Location: rem/3A24/3C18
Art Unit: 1642
Thursday, April 20, 2006
Case Serial Number: 09/277064

From: Toby Port
Location: Biotech-Chem Library
REM-1A59
Phone: (571)272-2523
toby.port@uspto.gov

Search Notes

Dear Examiner Davis,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Toby Port
Technical Information Specialist
STIC Biotech/Chem Library
(571)272-2523

73622

185852

mg

STIC-Biotech/ChemLib

From: Chan, Christina
Sent: Tuesday, April 18, 2006 11:48 AM
To: Davis, Minh-Tam; STIC-Biotech/ChemLib
Subject: RE: Rush search request for 09/277064

Please rush. Thanks Chris

Chris Chan
TC 1600 New Hire Training Coordinator and SPE 1644
(571)-272-0841
Remsen, 3E89

1600
1644
272-0841
Remsen
3E89

-----Original Message-----

From: Davis, Minh-Tam
Sent: Monday, April 17, 2006 2:01 PM
To: Chan, Christina
Subject: Rush search request for 09/277064

Please search in commercial database, issued patent files and PGPUB:
The peptide SEQ ID NO:9, with size limitation for the sequences in the database to the size of SEQ ID NO:9.
Thank you.
MINH TAM DAVIS
ART UNIT 1642, ROOM 3A24, MB 3C18
272-0830

Searcher: _____
Searcher Phone: _____
Date Searcher Picked up: _____
Date completed: _____
Searcher Prep Time: _____
Online Time: _____

Type of Search
NA# _____ AA# _____
S/L: _____ Oligomer: _____
Encode/Transl: _____
Structure #: _____ Text: _____
Inventor: _____ Litigation: _____

Vendors and cost where applicable
STN: _____
DIALOG: _____
QUESTEL/ORBIT: _____
LEXIS/NEXIS: _____
SEQUENCE SYSTEM: _____
WWW/Internet: _____
Other (Specify): _____

COMPUTER READABLE FORM:
 COMPUTER: IBM PC Compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.3.0
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/305,871A
 FILING DATE: 14-SEP-1994
 PRIORITY APPLICATION DATA:
 APPLICATION NUMBER: US 08/121,101
 FILING DATE: 14-SEP-1993
 ATTORNEY/AGENT INFORMATION:
 NAME: Basbian, Kevin L.
 REGISTRATION NUMBER: 34,774
 REFERENCE/DOCKET NUMBER: 14137-0062-10
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 576-0200
 TELEFAX: (415) 576-0300
 INFORMATION FOR SEQ ID NO: 14:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 STRANDEDNESS:
 TOPOLOGY: linear
 MOLECULE TYPE: Peptide
 US-08-305-871A-14

Query Match 100.0%; Score 74; DB 1; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.00028;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 Db 1 TPPAYRPNAPIL 13

RESULT 2
 US-08-464-496-19
 Sequence 19, Application US/08464496
 PRIORITY NUMBER: 6324789
 GENERAL INFORMATION:
 APPLICANT: Epimmune, Inc.
 APPLICANT: Vitiello, Maria
 APPLICANT: Chesnut, Robert
 TITLE OF INVENTION: HLA-RESTRICTED HEPATITIS B VIRUS CTL
 FILE REFERENCE: 39963-20001.13
 CURRENT APPLICATION NUMBER: US/08/464,496
 CURRENT FILING DATE: 1995-06-05
 PRIOR APPLICATION NUMBER: US/08/464,491
 PRIOR FILING DATE: 1992-08-26
 PRIOR APPLICATION NUMBER: 07/874,491
 PRIOR FILING DATE: 1992-04-27
 PRIOR APPLICATION NUMBER: 07/827,682
 PRIOR FILING DATE: 1992-01-29
 PRIOR APPLICATION NUMBER: 07/749,568
 PRIOR FILING DATE: 1991-08-26
 NUMBER OF SEQ ID NOS: 75
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO 19
 LENGTH: 13
 TYPE: PRY
 ORGANISM: Artificial Sequence
 FEATURE: OTHER INFORMATION: T helper epitope HBC 128-140
 US-08-464-496-19

Query Match 100.0%; Score 74; DB 2; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.00028;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 Db 1 TPPAYRPNAPIL 13

RESULT 4
 US-08-197-484-13
 Sequence 113, Application US/08197484
 PRIORITY NUMBER: 6324789
 GENERAL INFORMATION:
 APPLICANT: VITIELLO, Maria A.
 APPLICANT: CHESNUT, Robert W.
 APPLICANT: SETTE, Alessandro D.
 APPLICANT: CELIS, Esteban
 APPLICANT: GRAY, Howard
 TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING CTL IMMUNITY
 TITLE OF INVENTION: CTL IMMUNITY
 NUMBER OF SEQUENCES: 154
 CORRESPONDENCE ADDRESS:
 Qy 1 TPPAYRPNAPIL 13

ADDRESS: Townsend and Townsend Khourie and Crew
 STREET: Stewart Street Tower, One Market Plaza
 CITY: San Francisco
 STATE: California
 COUNTRY: US
 ZIP: 94105-1493
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: Patentin Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/08/197,484
 FILING DATE: 16-FEB-1994
 CLASSIFICATION: 424
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/935,811
 FILING DATE: 26-AUG-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/874,491
 FILING DATE: 27-APR-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/827,682
 FILING DATE: 29-JAN-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/749,568
 FILING DATE: 26-AUG-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Parmelee, Steven W.
 REGISTRATION NUMBER: 31,990
 REFERENCE/DOCKET NUMBER: 14137-26-4
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206) 467-9600
 TELEFAX: (206) 623-6793
 INFORMATION FOR SEQ ID NO: 113:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: peptide
 US-08-197-484-113

Query Match 100.0% Score 74; DB 2; Length 13;
 Best Local Similarity 100.0% Pred. No. 0.00028; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 Db 1 TPPAYRPNAPIL 13

RESULT 5
 US-09-311-784A-49
 Sequence 49, Application US/09311784A
 GENERAL INFORMATION:
 APPLICANT: Fikes, John D.
 APPLICANT: Hermanson, Gary G.
 APPLICANT: Sette, Alessandro
 APPLICANT: Ishioka, Glenn Y.
 APPLICANT: Livingston, Brian
 APPLICANT: Cheesnut, Robert W.
 APPLICANT: Epimmune, Inc.
 TITLE OF INVENTION: Expression Vectors for Stimulating an Immune Response and Methods of Using the Same
 FILE REFERENCE: 39963-2022.01
 CURRENT APPLICATION NUMBER: US/09/311,784A
 CURRENT FILING DATE: 1999-05-13
 PRIOR APPLICATION NUMBER: US 6/0/085,751
 PRIOR FILING DATE: 1998-05-15
 NUMBER OF SEQ ID NOS: 463
 SOFTWARE: FastSEQ for Windows Version 3.0

SEQ ID NO 49
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
 US-09-311-784A-49

Query Match 100.0% Score 74; DB 2; Length 13;
 Best Local Similarity 100.0% Pred. No. 0.00028; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 Db 1 TPPAYRPNAPIL 13

RESULT 6
 US-09-664-945-50
 Sequence 50, Application US/09664945
 Patent No. 6660842
 GENERAL INFORMATION:
 APPLICANT: Matti Sallberg
 TITLE OF INVENTION: LIGAND/RBCPTOR SPECIFICITY EXCHANGERS THAT REDIRECT ANTIBODIES TO RECEPTORS ON A PATHOGEN
 FILE REFERENCE: TRIPEP 007C93
 CURRENT APPLICATION NUMBER: US/09/664-945
 CURRENT FILING DATE: 2000-09-19
 PRIOR APPLICATION NUMBER: 09/532,106
 PRIOR FILING DATE: 2000-03-21
 PRIOR APPLICATION NUMBER: 09/246,258
 PRIOR FILING DATE: 1999-02-08
 PRIOR APPLICATION NUMBER: 08/737,085
 PRIOR FILING DATE: 1998-12-27
 PRIOR APPLICATION NUMBER: SE 9401460
 PRIOR FILING DATE: 1994-04-18
 NUMBER OF SEQ ID NOS: 105
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO 50
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Antigenic domain peptide

US-09-664-945-50

Query Match 100.0% Score 74; DB 2; Length 13;
 Best Local Similarity 100.0% Pred. No. 0.00028; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 Db 1 TPPAYRPNAPIL 13

RESULT 7
 US-10-372-735-55
 Sequence 55, Application US/10372735
 Patent No. 6913366
 GENERAL INFORMATION:
 APPLICANT: Sallberg, Matti
 TITLE OF INVENTION: SPECIFICITY EXCHANGERS THAT REDIRECT ANTIBODIES TO A PATHOGEN
 FILE REFERENCE: TRIPEP 7AUCAP1
 CURRENT APPLICATION NUMBER: US/10/372,735
 CURRENT FILING DATE: 2003-02-21
 PRIOR APPLICATION NUMBER: 10/234,579
 PRIOR FILING DATE: 2002-08-30
 PRIOR APPLICATION NUMBER: 09/839,666
 PRIOR FILING DATE: 2001-04-19
 PRIOR APPLICATION NUMBER: 09/532,106
 PRIOR FILING DATE: 2000-03-21
 PRIOR APPLICATION NUMBER: 09/246,258

PRIOR FILING DATE: 1999-02-08
 PRIOR APPLICATION NUMBER: 08/737,085
 PRIOR FILING DATE: 1996-12-27
 PRIOR APPLICATION NUMBER: PCT/SE95/00468
 PRIOR FILING DATE: 1995-04-27
 PRIOR APPLICATION NUMBER: 09/664,945
 PRIOR FILING DATE: 2000-09-19
 PRIOR APPLICATION NUMBER: 09/664,025
 PRIOR FILING DATE: 2000-09-19
 PRIOR APPLICATION NUMBER: PCT/IB01/02327
 PRIOR FILING DATE: 2001-09-19
 PRIOR APPLICATION NUMBER: 10/153,271
 PRIOR FILING DATE: 2002-05-21
 Remaining Prior Application data removed - See File Wrapper or PALM.
 NUMBER OF SEQ ID NOS: 199
 SEQ ID NO: 55
 LENGTH: 13
 TYPE: PRO
 ORGANISM: Artificial Sequence
 FEATURE: OTHER INFORMATION: Artificially Synthesized Peptides
 US-10-372-735-55

Query Match 100.0%; Score 74; DB 2; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.00028;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

RESULT 9
 PCT-US95-02121-113
 Sequence 113, Application PC/TUSS9502121
 GENERAL INFORMATION:
 APPLICANT:
 TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR ELICITING
 NUMBER OF INVENTION: CTL IMMUNITY
 NUMBER OF SEQUENCES: 153
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: PCT/US95/02121
 FILING DATE: 16-FEB-1995
 CLASSIFICATION:
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 08/197,484
 FILING DATE: 16-FEB-1994
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/935,811
 FILING DATE: 26-AUG-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/874,491
 FILING DATE: 27-APR-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/827,682
 FILING DATE: 29-JAN-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/749,568
 FILING DATE: 26-AUG-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Parmelee, Steven W.
 REGISTRATION NUMBER: 3,1,990
 REFERENCE/DOCKET NUMBER: 14137-26-4PC
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (206) 467-9600
 TELEFAX: (415) 543-5043
 INFORMATION FOR SEQ ID NO: 113:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 STRANDEDNESS: unknown
 TOPOLOGY: unknown
 MOLECULE TYPE: peptide

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.00028;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 TPPAYRPPNAPIL 13
 PCT-US95-02121-113

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.00028;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 TPPAYRPPNAPIL 13
 PCT-US95-02121-113

PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/749,568
 FILING DATE: 26-AUG-1991
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/827,682
 FILING DATE: 29-JAN-1992
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US 07/874,491
 FILING DATE: 27-APR-1992
 ATTORNEY/AGENT INFORMATION:
 NAME: Smith, William M.
 REGISTRATION NUMBER: 30,723
 REFERENCE/DOCKET NUMBER: 14137-26-3
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: 415-326-2400

Db 1 TPPAYRPPNAPIL 13

Db 1 TPPAYRPPNAPI 13

RESULT 10
PCT-US95-16415-9
Sequence 9, Application PC/TUS9516415

GENERAL INFORMATION:
APPLICANT: The Scripps Research Institute
TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC
TITLE OF INVENTION: CYTOTOXIC T CELLS

NUMBER OF SEQUENCES: 38

RESPONSE ADDRESS:
ADDRESSE: The Scripps Research Institute
STREET: 10666 North Torrey Pines Road, TPC-8
CITY: La Jolla
STATE: California
COUNTRY: US
ZIP: 92037

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:
APPLICATION NUMBER: PCT/US95/16415
FILING DATE: 13-DEC-1995

PRIOR APPLICATION DATA:
APPLICATION NUMBER: US 08/355,558
FILING DATE: 14-DEC-1994

ATTORNEY/AGENT INFORMATION:
NAME: Logan, April C.
REGISTRATION NUMBER: 33,950
REFERENCE/DOCKET NUMBER: 433.1PC

TELEPHONE: (619) 554-2937
TELEFAX: (619) 554-6312
9:

SEQUENCE CHARACTERISTICS:
LENGTH: 13 amino acids
TYPE: amino acid
TOPOLOGY: linear
MOLECULE TYPE: peptide

PCT-US95-16415-9

Query Match Similarity 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.00028; Mismatches 0; Indels 0; Gaps 0;

2 1 TPPAYRPPNAPI 13
Db 1 TPPAYRPPNAPI 13

RESULT 11
US-09-239-043D-1127
Sequence 1127, Application US/09239043D

GENERAL INFORMATION:
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Vitiello, Maria A.
APPLICANT: Livingston, Brian D.
APPLICANT: Celi, Esteban
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Chesnut, Robert
APPLICANT: Spimune Inc.

TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions

FILE REFERENCE: 2060-0060007
CURRENT APPLICATION NUMBER: US/09/239,043D

RESULT 12
US-09-239-043D-1666
Sequence 1666, Application US/09239043D

GENERAL INFORMATION:
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Vitiello, Maria A.
APPLICANT: Livingston, Brian D.
APPLICANT: Celi, Esteban
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Chesnut, Robert
APPLICANT: Spimune Inc.

TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis
TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions

FILE REFERENCE: 2060-0060007
CURRENT APPLICATION NUMBER: US/09/239,043D

RESULT 13
US-09-239-043D-1127
Sequence 1127, Application US/09239043D

GENERAL INFORMATION:
APPLICANT: Sette, Alessandro
APPLICANT: Sidney, John
APPLICANT: Southwood, Scott
APPLICANT: Vitiello, Maria A.
APPLICANT: Livingston, Brian D.
APPLICANT: Celi, Esteban
APPLICANT: Kubo, Ralph T.
APPLICANT: Grey, Howard M.
APPLICANT: Chesnut, Robert
APPLICANT: Spimune Inc.

TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions

FILE REFERENCE: 2060-0060007
CURRENT APPLICATION NUMBER: US/09/239,043D

```

; PRIOR APPLICATION NUMBER: US 08/278, 634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205, 713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197, 484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1666
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
; US-09-239-043D-1666

Query Match 83.8%; Score 62; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.01;
Matches 11; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

Qy 3 PAVRPNAPIL 13
Db 1 PAVRPNAPIL 11

RESULT 14
US-09-239-043D-1442
; Sequence 1442, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Sidney, John
; APPLICANT: Southwood, Scott
; APPLICANT: Vitelli, Maria A.
; APPLICANT: Livingston, Brian D.
; APPLICANT: Celis, Esteban
; APPLICANT: Kubo, Ralph T.
; APPLICANT: Grey, Howard M.
; APPLICANT: Chesnut, Robert
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060_0060007
; CURRENT APPLICATION NUMBER: US/09/239, 043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189, 702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978, 291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820, 360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013, 363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461, 603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347, 610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344, 824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278, 634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205, 713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197, 484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 25/9
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1442
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
; US-09-239-043D-1442

Query Match 83.8%; Score 62; DB 2; Length 11;
Best Local Similarity 100.0%; Pred. No. 0.01;
Matches 11; Conservative 0; Mismatches 0; Indels 0;
Gaps 0;

Qy 3 PAVRPNAPIL 13
Db 1 PAVRPNAPIL 11

RESULT 15
US-09-239-043D-1148
; Sequence 1148, Application US/09239043D
; Patent No. 6689363
; GENERAL INFORMATION:
; APPLICANT: Sette, Alessandro
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
; FILE REFERENCE: 2060_0060007
; CURRENT APPLICATION NUMBER: US/09/239, 043D
; CURRENT FILING DATE: 1999-01-27
; PRIOR APPLICATION NUMBER: US 09/189, 702
; PRIOR FILING DATE: 1998-11-10
; PRIOR APPLICATION NUMBER: US 08/978, 291
; PRIOR FILING DATE: 1997-11-25
; PRIOR APPLICATION NUMBER: US 08/820, 360
; PRIOR FILING DATE: 1997-03-12
; PRIOR APPLICATION NUMBER: US 60/013, 363
; PRIOR FILING DATE: 1996-03-13
; PRIOR APPLICATION NUMBER: US 08/461, 603
; PRIOR FILING DATE: 1995-06-05
; PRIOR APPLICATION NUMBER: US 08/347, 610
; PRIOR FILING DATE: 1994-12-01
; PRIOR APPLICATION NUMBER: US 08/344, 824
; PRIOR FILING DATE: 1994-11-23
; PRIOR APPLICATION NUMBER: US 08/278, 634
; PRIOR FILING DATE: 1994-07-21
; PRIOR APPLICATION NUMBER: US 08/205, 713
; PRIOR FILING DATE: 1994-03-04
; PRIOR APPLICATION NUMBER: US 08/197, 484
; PRIOR FILING DATE: 1994-02-16
; Remaining Prior Application data removed - See File Wrapper or PALM.
; NUMBER OF SEQ ID NOS: 25/9
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 1148
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
; US-09-239-043D-1148
; NUMBER OF SEQ ID NOS: 25/9
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 392
; LENGTH: 11
; TYPE: PRT
; ORGANISM: Orthohepadnaviridae hepatitis B virus
; US-09-239-043D-392

```

APPLICANT: Sidney, John
 APPLICANT: Southwood, Scott
 APPLICANT: Vitiello, Maria A.
 APPLICANT: Livingston, Brian D.
 APPLICANT: Ceballos, Esteban
 APPLICANT: Kubo, Ralph T.
 APPLICANT: Grey, Howard M.
 APPLICANT: Chesnut, Robert
 APPLICANT: Epimmune Inc.

TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
 FILE REFERENCES: 2060.0060007
 CURRENT APPLICATION NUMBER: US/09/239,043D
 CURRENT FILING DATE: 1999-01-27
 PRIOR APPLICATION NUMBER: US 09/189,702
 PRIOR FILING DATE: 1998-11-10
 PRIOR APPLICATION NUMBER: US 08/978,291
 PRIOR FILING DATE: 1997-11-25
 PRIOR APPLICATION NUMBER: US 08/820,360
 PRIOR FILING DATE: 1997-03-12
 PRIOR APPLICATION NUMBER: US 60/013,363
 PRIOR FILING DATE: 1996-03-13
 PRIOR APPLICATION NUMBER: US 08/461,603
 PRIOR FILING DATE: 1995-06-05
 PRIOR APPLICATION NUMBER: US 08/347,610
 PRIOR FILING DATE: 1994-12-01
 PRIOR APPLICATION NUMBER: US 08/344,824
 PRIOR FILING DATE: 1994-11-23
 PRIOR APPLICATION NUMBER: US 08/278,634
 PRIOR FILING DATE: 1994-07-21
 PRIOR APPLICATION NUMBER: US 08/205,713
 PRIOR FILING DATE: 1994-03-04
 PRIOR APPLICATION NUMBER: US 08/197,484
 PRIOR FILING DATE: 1994-02-16
 Remaining Prior Application data removed - See File Wrapper or PALM.
 NUMBER OF SEQ ID NOS: 2579
 SOFTWARE: FastSEQ for Windows Version 4.0

Query Match 79.7%; Score 59; DB 2; Length 11;
 Best Local Similarity 100.0%; Pred. No. 0.028;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNA 10
 Db 2 TPPAYRPPNA 11

RESULT 17
 US-09-239-043D-391
 Sequence 391, Application US/09239043D
 / TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
 / Patent No. 6689363
 / GENERAL INFORMATION:
 / APPLICANT: Sette, Alessandro
 / APPLICANT: Sidney, John
 / APPLICANT: Southwood, Scott
 / APPLICANT: Vitiello, Maria A.
 / APPLICANT: Livingston, Brian D.
 / APPLICANT: Kubo, Ralph T.
 / APPLICANT: Grey, Howard M.
 / APPLICANT: Chesnut, Robert
 / APPLICANT: Epimmune Inc.

TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
 FILE REFERENCES: 2060.0060007
 CURRENT APPLICATION NUMBER: US/09/239,043D
 CURRENT FILING DATE: 1999-01-27
 PRIOR APPLICATION NUMBER: US 09/189,702
 PRIOR FILING DATE: 1998-11-10
 PRIOR APPLICATION NUMBER: US 08/978,291
 PRIOR FILING DATE: 1997-11-25
 PRIOR APPLICATION NUMBER: US 08/820,360
 PRIOR FILING DATE: 1997-03-12
 PRIOR APPLICATION NUMBER: US 60/013,363
 PRIOR FILING DATE: 1996-03-13
 PRIOR APPLICATION NUMBER: US 08/461,603
 PRIOR FILING DATE: 1995-06-05
 PRIOR APPLICATION NUMBER: US 08/347,610
 PRIOR FILING DATE: 1994-12-01
 PRIOR APPLICATION NUMBER: US 08/344,824
 PRIOR FILING DATE: 1994-11-23
 PRIOR APPLICATION NUMBER: US 08/278,634
 PRIOR FILING DATE: 1994-07-21

PRIOR APPLICATION NUMBER: US 08/205,713
 PRIOR FILING DATE: 1984-03-04
 PRIOR APPLICATION NUMBER: US 08/197,484
 PRIOR FILING DATE: 1984-02-16
 Remaining Prior Application data removed - See File Wrapper or PALM.

NUMBER OF SEQ ID NOS: 2579
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 391
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Orthopednaviridae hepatitis B virus

US-09-239-043D-391

Query Match 78.4%; Score 58; DB 2; Length 10;
 Best Local Similarity: 100.0%; Pred. No. 0.035; Mismatches 0; Indels 0; Gaps 0;

Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 3 PAYRPNAPI 12
 Db 1 PAYRPNAPI 10

RESULT 19
 US-08-159-339A-402

Sequence 402, Application US/08159339A
 ; GENERAL INFORMATION:
 ; PATENT NO. 6037135
 ; APPLICANT: Kubo, Ralph T.
 ; APPLICANT: Grey, Howard M.
 ; APPLICANT: Sette, Alessandro
 ; APPLICANT: Celis, Esteban
 ; TITLE OF INVENTION: HLA Binding peptides and Their
 ; TITLE OF INVENTION: Uses
 ; NUMBER OF SEQUENCES: 1254
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Townsend and Townsend and Crew LLP
 ; STREET: Two Embarcadero Center, Eighth Floor
 ; CITY: San Francisco
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94111-3814
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSEQ for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/08/159,339A
 ; FILING DATE: 29-NOV-1993
 ; CLASSIFICATION: 424
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: US 07/926,666
 ; FILING DATE: 07-AUG-1992
 ; APPLICATION NUMBER: US 08/103,396
 ; FILING DATE: 06-AUG-1993
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Weber, Ellen Lauver
 ; REGISTRATION NUMBER: 32,762
 ; REFERENCE DOCKET NUMBER: 018623-005030US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: (415) 576-0200
 ; TELEFAX: (415) 576-0300
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 402:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 10 amino acid
 ; TYPE: amino acid
 ; STRANDEDNESS: single
 ; TOPOLOGY: linear
 ; MOLECULE TYPE: peptide
 ; US-08-159-339A-402

Query Match 74.3%; Score 55; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.09; Mismatches 0; Indels 0; Gaps 0;

Qy 4 AYRPNAPI 13
 Db 1 AYRPNAPI 10

RESULT 20
 US-09-239-043D-673

Sequence 673, Application US/09239043D
 ; GENERAL INFORMATION:
 ; PATENT NO. 6683363
 ; NUMBER OF SEQ ID NOS: 2579
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 1441
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Orthopednaviridae hepatitis B virus

US-09-239-043D-1441

Query Match 78.4%; Score 58; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.035;

/ APPLICANT: Sette, Alessandro
 / APPLICANT: Sidney, John
 / APPLICANT: Southwood, Scott
 / APPLICANT: Vitiello, Maria A.
 / APPLICANT: Vitello, Scott
 / APPLICANT: Livingston, Brian D.
 / APPLICANT: Celis, Esteban
 / APPLICANT: Kubo, Ralph T.
 / APPLICANT: Grey, Howard M.
 / APPLICANT: Chesnut, Robert
 / APPLICANT: Epimmune Inc.
 / TITLE OF INVENTION: Inducing Cellular Immune Responses to Hepatitis B Virus
 / TITLE OF INVENTION: Using Peptide and Nucleic Acid Compositions
 / CURRENT APPLICATION NUMBER: US/09/239,043D
 / CURRENT FILING DATE: 1999-01-27
 / PRIORITY NUMBER: US 09/189,702
 / PRIORITY FILING DATE: 1998-11-10
 / PRIORITY NUMBER: US 08/978,291
 / PRIORITY FILING DATE: 1997-11-25
 / PRIORITY NUMBER: US 08/820,360
 / PRIORITY FILING DATE: 1997-03-12
 / PRIORITY NUMBER: US 60/013,363
 / PRIORITY FILING DATE: 1996-03-13
 / PRIORITY NUMBER: US 08/461,603
 / PRIORITY FILING DATE: 1995-06-05
 / PRIORITY NUMBER: US 08/347,610
 / PRIORITY FILING DATE: 1994-12-01
 / PRIORITY NUMBER: US 08/344,824
 / PRIORITY FILING DATE: 1994-11-23
 / PRIORITY NUMBER: US 08/278,634
 / PRIORITY FILING DATE: 1994-07-21
 / PRIORITY NUMBER: US 08/205,713
 / PRIORITY FILING DATE: 1994-03-04
 / PRIORITY NUMBER: US 08/197,484
 / PRIORITY FILING DATE: 1994-02-16
 / Remaining Prior Application data removed - See File Wrapper or PALM.
 / NUMBER OF SEQ ID NOS: 2579
 / SOFTWARE: FastSEQ for Windows Version 4.0
 / SEQ ID NO: 673
 / LENGTH: 10
 / TYPE: PRT
 / ORGANISM: Orthohepadnaviridae hepatitis B virus
 / US-09-239-043D-673 ...

Query Match 74.3%; Score 55; DB 2; Length 10;
 Best Local Similarity 100.0%; Pred. No. 0.09;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy	4 AYRPPNAPIL 13
Db	1 AYRPPNAPIL 10

Search completed: April 19, 2006, 19:33:25
 Job time : 47 secs

XX 04-MAR-1993.
 PD 92WO-US007218.
 XX 26-AUG-1992; 92WO-US007218.
 PF (CYTB-) CYTEL CORP.
 XX 26-AUG-1991; 91US-0074956.
 PR 29-JAN-1992; 92US-00827682.
 PR 27-APR-1992; 92US-00874491.
 XX WPI; 1993-093728/11.
 PT Cytotoxic T-lymphocyte stimulating peptide(s) - derived from hepatitis B virus useful for treating, preventing and diagnosing infection.
 XX Disclosure; Page 21; 89pp; English.
 PS Sequence 13 AA;

XX This is a T helper epitope peptide, the sequence of which is derived from hepatitis B virus (HBV) core antigen amino acids 128-140. It may be used in a conjugate with cytotoxic T-lymphocyte stimulating (CTL) peptides to enhance an individual's immunity by providing cell-mediated immunity and protective antibodies. (Updated on 25-MAR-2003 to correct PN Field.)
 XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 2; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

RESULT 3
 ID AAN39439 standard; peptide; 13 AA.
 XX AAN39439;
 AC AAN39439;
 XX 11-JUN-1998 (first entry)
 DT XX
 DE Mouse H-2 I-Ab-restricted HBV core antigen-derived T helper epitope.
 XX KW T cell epitope; immune response; human leukocyte antigen; HLA Class I;
 KW vaccine; immunogenic; major histocompatibility complex; MHC; B cell;
 KW disease; anti-tumour; anti-viral.
 OS Synthetic.
 XX WO9741440-A1.
 XX PD 06-NOV-1997.
 XX PF 28-APR-1997; 97WO-NL000229.
 XX PR 26-APR-1996; 96EP-00201145.
 AC PR 23-DEC-1996;
 XX PA (UTLE-) RIJKSUNIV LEIDEN.
 DT PA (SCIS-) SCI SEED CAPITAL INVESTMENTS BV.
 XX PI Van Der Burg SH, Kast WM, Toes REM, Offringa R, Melief CJM;
 DR WPI; 1997-549891/50.
 PT Method of selecting T cell peptide epitope(s) - by measuring the stability of HLA class I-peptide complexes on intact B cells.
 XX Example 2; Page 21; 109pp; English.
 XX CC Peptides AAN39430-W39734 are used in a novel method for the selection of immunogenic T-cell peptide epitopes present in polypeptide antigens.
 CC Peptide AAN39439 is a mouse H-2 I-Ab restricted HBV core antigen-derived T helper epitope which is injected into HLA-A*0201Kb transgenic mice. The method involves the identification of peptide sequences capable of binding to an HLA (human leukocyte antigen) class I molecule and measuring the binding of this epitope peptide to the HLA class I peptide.
 CC The stability of binding of the peptide and MHC (major histocompatibility complex) class I molecule is measured on intact human B cells carrying the MHC molecule at their cell surfaces. The method can be used to select peptide epitopes for generating vaccines against a disease associated with the polypeptide, e.g. cancers or AIDS. The peptide epitopes are especially T-cell peptide epitopes with strong anti-tumour and anti-viral immune responses.

XX SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 2; Length 13;

XX PS Sequence 13 AA;

XX PS Example 4; Page 52; 109pp; English.
 XX DR 1995-302545/39.
 XX PT Compan. inducing cytotoxic T lymphocyte response to pref. viral, bacterial, parasitic or tumour antigens - useful in the treatment and prevention of diseases associated with the antigen e.g. hepatitis B.
 XX PT
 XX PS

Qy	1 TPPAYRPNNAPIL 13	Pred. No. 0.0017;	Best Local Similarity 100.0%;	Matches 13; Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;
Db	1 TPPAYRPNNAPIL 13						
Db	1 TPPAYRPNNAPIL 13						
RESULT 4							
AAW50117							
AAW50117	AAW50117 standard; peptide; 13 AA.						
XX	AAW50117; -						
AC	XX						
DT	XX						
XX	30-JUN-1998 (first entry)						
XX	Pan DR binding peptide (14).						
XX	KW						
XX	OS						
XX	Synthetic.						
DB	US5736142-A.						
DB	07-APR-1998.						
XX	XX						
XX	14-SEP-1994; 94US-00305871.						
XX	14-SEP-1993; 93US-00121101.						
XX	PA (CYTE-) CYTEL CORP.						
PR	Sidney J, Sette A, Alexander JL, Gaeta F, Grey HM;						
PR	WPI: 1998-239154/21.						
DR	XX						
PT	XX						
PT	Peptides that bind to MHC molecules of all DR alleles - inhibiting or inducing MHC Class II mediated activation of T cells.						
PT	Example 5; Col 35-36; 29pp; English.						
PT	The present sequence, a pan DR binding peptide, is capable of binding antigen binding sites on MHC molecules, which are encoded by most of the alleles of a DR locus. The peptide can be used to inhibit or induce MHC Class II mediated activation of T-cells or helper T-cells, which themselves mediate a CTL response. The peptide can be used in mammals, especially humans, to inhibit T-cell mediated events involved in allograft rejection, allergic responses and autoimmunity and as a vaccine adjuvant for enhancing an immune response against an administered immunogen. The peptide can be used with other immunogens to treat, e.g. prostate cancer, hepatitis B, hepatitis C, AIDS, renal and cervical carcinoma, lymphoma, CMV and condyloma acuminatum						
XX	Sequence 13 AA;						
SQ	Query Match Score 74; DB 2; Length 13;						
SQ	Best Local Similarity 100.0%;	Pred. No. 0.001;	Matches 13; Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;	
Qy	1 TPPAYRPNNAPIL 13						
Db	1 TPPAYRPNNAPIL 13						
SQ	Query Match Score 74; DB 3; Length 13;						
SQ	Best Local Similarity 100.0%;	Pred. No. 0.001;	Matches 13; Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;	
Qy	1 TPPAYRPNNAPIL 13						
Db	1 TPPAYRPNNAPIL 13						
RESULT 5							
AA52556							
AA52556	AA52556 standard; peptide; 13 AA.						
XX	AC AAY52556;						
DT	06-AUG-2003 (revised)						
DT	28-FEB-2000 (first entry)						

Novel polynucleotide having DNA sequence encoding tumor antigen epitope inserted in part of coding sequence of middle glycoprotein of hepatitis B virus, used to induce immune response against tumor-specific antigen.

Example 1; Page 13; 36pp; English.

The present invention relates to an isolated or purified polynucleotide containing a DNA sequence coding for at least one tumour epitope of a tumour antigen inserted into part of the coding sequence of the middle glycoprotein of the Hepatitis B virus (HBV). The polynucleotide is useful for optionally evaluating cytotoxic responses in the individual's lymphocyte population. It induces an immune response against at least one tumour specific antigen or tissue specific antigen. The vector comprising the polynucleotide induces in vivo, cellular and/or humoral immune response. The composition comprising the polynucleotide induces in vivo, cytotoxic T lymphocyte (CTL) against one or more antigens or epitopes present on the hybrid protein. The polynucleotide is also useful in gene therapy. The present sequence is a Hepatitis B virus core (HBVc) tumour epitopic peptide. This peptide elicits HLA (human leucocyte antigen)-A2.1 - restricted CTL response in mice

SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

RESUME 9
 AAG62426
 ID AAG62426 standard; peptide; 13 AA.
 XX
 AC AAG62426;
 XX
 DT 03-SEP-2001 (first entry)
 XX
 DE Immunogenic peptide HBV core SEQ ID 30.
 XX
 KW Class I epitope; immunogenic; heteroclitic analogue; immune response; antigen display; viral disease; cancer.

OS Synthetic.

PR WO2001336452-A2.

XX
 PD 25-MAY-2001.XX
 PF 20-NOV-2000; 2000WO-US031856.XX
 PR 18-NOV-1999; 99US-01665229P.XX
 PR 06-OCT-2000; 2000US-0239008P.XX
 PA (EPIM-) EPIMUNE INC.XX
 PI Tangri S, Sette A, Ishioka G;XX
 DR WPI; 2001-355609/37.

Enhancing immunogenicity of peptide containing class I epitope, useful for treating cancer, comprises providing (semi-)conservative amino acid substitutions at specified positions of these epitopes.

Disclosure; Fig 1A; 96pp; English.

This invention relates to a method of enhancing the immunogenicity of a peptide, where the peptide contains a class I epitope. The invention includes methods for preparing peptides containing epitopes which have enhanced ability to effect an immune response (compared to wild-type

epitopes). The peptides are referred to as heteroclitic analogues. The method is useful for eliciting an immune response by contacting CTUs with the immunogenically enhanced peptide in vitro in the presence of an antigen presenting cell, or by administering to a subject a nucleic acid molecule comprising a nucleotide sequence encoding the peptide. The peptides are useful as reagents to evaluate an immune response and the efficacy of the vaccine and for making antibodies. The heteroclitic analogues are useful in immunological compositions for the treatment of viral diseases, cancer, and other conditions which are characterised by displayed antigens on target cells. The present sequence represents a class I epitope which may be used in the method of the invention

SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

SQ Sequence 13 AA;

RESULT 10
 AAB82775
 ID AAB82775 standard; protein; 13 AA.
 XX
 AC AAB82775;
 XX
 DT 06-AUG-2003 (revised)
 DT 29-OCT-2001 (first entry)

DE Hepatitis B core antigen peptide.

XX
 Telomerase reverse transcriptase; hTRT; human; cytotoxic T lymphocyte; major histocompatibility complex; cancer; tumour; human leucocyte antigen; HLA-A2.1; HBVc; vaccine.

XX
 OS Hepatitis B virus.

XX
 WO200160391-A1.

XX
 PN 2001-536552/59.

XX
 PD 23-AUG-2001.

XX
 PF 15-FEB-2001; 2001WO-US005143.

XX
 PR 15-FEB-2000; 2000US-0182685P.

XX
 PR 15-FEB-2001; 2001US-00182685.

XX
 PA (REGC) UNIV CALIFORNIA.

XX
 PI Zanetti M;

XX
 DR 2001-536552/59.

XX
 PR Vaccine for initiating and enhancing a cytotoxic T lymphocyte response, for treating cancers or tumors or for inducing immune response against tumors, comprises a telomerase reverse transcriptase peptide.

XX
 PT Example 1; Page 12; 52pp; English.

The present sequence is that of a hepatitis B virus core antigen (HBVc) peptide comprising amino acid residues 128-140. The peptide was used to immunise HHD mice and results were compared with those obtained using human telomerase reverse transcriptase (hTRT) HLA-A2.1+ restricted peptide p540 (see AAB82772). The induction of CTL responses in vitro and in vivo, and the susceptibility to lysis of tumour cells of various origins by hTRT CTL suggest that hTRT could serve as a universal cancer vaccine for humans. A claimed universal vaccine for treating tumours of any origin comprises at least 1 hTRT peptide. The peptide is 7-15 amino acid residues in length and may be modified to enhance binding to the major histocompatibility complex. Also claimed is a method for inducing and enhancing a CTL response against cancer cells, involving harvesting

CC blood leucocytes, pulsing with hTRT, and contacting cancer cells with the
 CC pulsing leucocytes. A method for targeting CRL to tumour cells is also
 CC claimed, and involves administering a hTRT peptide to a mammal, especially a cancer patient. (Updated on 06-AUG-2003 to correct OS
 CC field.)

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 1 TPPAYRPNAPIL 13
 Db

RESULT 11
 AAU00614
 ID AAU00614 standard; peptide, 13 AA.

XX AC AAU00614;

XX DT 12-SEP-2001 (first entry)

XX DE H-2 I-Ab-restricted HBV core antigen-derived T helper epitope.

XX Human; MUC1; antigenic peptide; major histocompatibility complex; MHC-I; glycoprotein; cytotoxic T lymphocytes; T cell response; cancer; vaccine; cancer gene therapy; diagnosis; treatment; inflammatory disorder; HBV; organ transplant rejection; graft versus host disease.

OS Hepatitis B virus.

XX PN WO200118035-A2.

XX PD 15-MAR-2001.

XX PF 07-SEP-2000; 2000WO-EP008761.

XX PR 08-SEP-1999; 99GB-00021242.

XX PR 10-SEP-1999; 99EP-00402237.

XX PR 03-MAR-2000; 2000US-01872157.

XX PA (TRGE) TRANSGENE SA.

PA (IMCR) IMPERIAL CANCER RES TECHNOLOGY LTD.

XX PI Taylor-Papadimitriou J, Heukamp LC, Offeringa R, Melief CJJM;

PI Acres B, Thomas M;

DR WPI; 2001-235187/24.

XX PT Example 5; Page 42; 81pp; English.

PT The sequence represents an H-2 I-Ab-restricted hepatitis B virus (HBV) core antigen-derived T helper epitope used in testing of human MUC1 polypeptide derivatives through a cytotoxic T lymphocyte (CTL) assay. Derivative antigenic peptides of MUC1 protein bind at least one major histocompatibility complex class I (MHC-I) glycoprotein, which activates cytotoxic T lymphocytes to induce a protective response against tumours. Diagnosis of cancer involves determining the presence or absence in a host cell of MHC class I restricted T cell response to a MUC1 derivative, where the presence of the MHC class I restricted T cell response indicates that the host has cancer. Measurement of the level of MHC class I restricted T cell response is also useful to monitor the severity of cancer, a larger response indicating a more severe cancer. MUC1 derivatives are useful in cancer therapy and to follow MUC1 specific immune responses in patients during the course of disease and/or

CC treatment. MUC1 DNA is useful in cancer gene therapy, vaccination and diagnosis. Compositions of the sequences are used in vaccines and treatments against cancer or diseases caused by an immune response, such as an inflammatory disorder, organ transplant rejection or graft versus host disease

XX SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Gaps 0;

Qy 1 TPPAYRPNAPIL 13
 1 TPPAYRPNAPIL 13
 Db

RESULT 12
 AAU0851
 ID AAU0851 standard; peptide, 13 AA.

XX AC AAU0851;

XX DT 14-FEB-2002 (first entry)

XX DE Hepatitis B virus antigen binding partner #83.

XX Hepatitis B virus; virucide; immunomodulator; hepatotrophic; HBV; antiinflammatory; HBV core antigen; HBcAg; HBV E antigen; HBsAg; B cell mediated processing; T cell proliferation; cytokine production; immune system response.

XX OS Synthetic.

XX PN WO200181421-A2.

XX PD 01-NOV-2001.

XX PF 20-APR-2001; 2001WO-IB000844.

XX PR 21-APR-2000; 2000US-00556605.

XX PA (TRGP-) TRIPPEP AB.

XX PI Salberg M;

XX WPI; 2002-055147/07.

XX PT Novel peptide that binds to hepatitis B virus core or E antigen, useful for treating and preventing hepatitis B virus infection.

XX PS Example 6; Page 28; 82pp; English.

CC The invention relates to an isolated or purified peptide (I) which binds CC Hepatitis B virus core antigen (HBcAg) or HBV E antigen (HBsAg). CC (I) is useful for treating or preventing Hepatitis B virus (HBV) CC infection, by identifying a subject in need of a molecule that inhibits CC HBV infection, and providing the subject with (I). (I) is also useful for CC determining the presence of HBV in a biological sample, and for CC inhibiting B cell mediated processing and uptake of HBcAg and/or HBsAg, CC by determining whether (I) inhibits B cell mediated processing and uptake CC of HBcAg and/or HBsAg by performing an assay of T cell proliferation or CC cytokine production. (I) is also useful for modulating an immune system CC response. (I) is useful as a template for a design of synthetic molecules CC including peptides, derivatives or modified peptides, peptidomimetics and CC chemicals. (I) is also useful as a biotechnological tool, diagnostic CC reagent and as active ingredient in pharmaceuticals. (I) is also useful CC as detection reagents in conventional immunohistochemical techniques, as CC diagnostic reagents to detect HBV in biological sample, and to determine CC the efficacy of an HBV treatment protocol by monitoring the levels of CC HBcAg and/or HBsAg during and after treatment. AAU07056-AAU70876 CC represent Hepatitis B virus (HBV) core antigen (HBcAg) or HBV E antigen (HBsAg) binding partners as described in the invention.

xx Sequence 13 AA;
 SQ Sequence 13 AA;
 Query Match 100.0%; Score 74; DB 5; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0017;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 OS Hepatitis B virus.
 Hepatitis B virus.

xx Antigenic domain peptide from a Hepatitis B virus protein.
 DE Antigenic domain peptide from a Hepatitis B virus protein.
 XX Ligand/receptor specificity exchanger; antibody; pathogen receptor;
 KW bacterial infection; viral infection; yeast infection; cancer;
 KW parasitic infection; fungal infection; proliferation; antibiotic;
 KW viricide; cytostatic; antifungal; antigenic domain.
 XX OS Hepatitis B virus.

xx DE WO200224887-A2.
 XX PN WO200224887-A2.
 XX XX
 PD 28-MAR-2002.
 PF 19-SEP-2001; 2001WO-IB002327.
 XX PR 19-SEP-2000; 2000US-00664025.
 PA (TRIP-) TRIPPEP AB.
 XX PI Sallberg M, Flock J;
 XX DR WPI; 2002-489307/52.
 XX PT Novel ligand/receptor specificity exchanger that redirects antibodies to
 PT receptors on pathogen or tumor cell, has specificity domain having ligand
 PT for receptor, and antigenic domain having epitope of pathogen or toxin.
 XX PS Claim 14; Page 14; 79pp; English.
 XX
 CC The present invention relates to ligand/receptor specificity exchangers
 CC comprising at least one specificity domain comprising a ligand for a
 CC receptor, and at least one antigenic domain joined to the specificity domain of a pathogen or
 CC toxin. The ligand/receptor specificity exchangers redirect antibodies to
 CC receptors present on pathogens. They are useful for preventing and
 CC treating human diseases such as bacterial, viral, yeast, parasitic and
 CC fungal infections, and cancer. These compositions act by inhibiting
 CC proliferation of pathogens, or cancer cells. One of the prophylactic
 CC applications of the ligand/receptor specificity exchangers includes
 CC coating or crosslinking it to a medical device or implant which include
 CC implantable medical devices that tend to serve as foci for infection by a
 CC number of bacterial species. ABG62853-ABG62869 represent antigenic domain
 CC peptides used in the methods of the present invention
 XX SQ Sequence 13 AA;
 XX
 CC Query Match 100.0%; Score 74; DB 5; Length 13;
 CC Best Local Similarity 100.0%; Pred. No. 0.0017;
 CC Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 CC AC ABP52344;
 CC DB 17-OCT-2002 (first entry)
 CC DE TH epitope.
 CC XX
 CC KW Cytotoxic T lymphocyte; CTL; helper; MAGE3; cytotoxic T cell response;
 CC KW tumour; immune response; cancer; vaccine; antibody.
 CC OS Synthetic.
 CC XX
 CC PN WO200258728-A2.
 CC XX
 CC PD 01-AUG-2002.

xx DE ABP52344 standard; peptide; 13 AA.
 XX ID ABG62860 standard; peptide; 13 AA.
 XX AC ABG62860;
 XX DT 21-AUG-2002 (first entry)

xx DE ABP52344 standard; peptide; 13 AA.
 XX ID ABG62860 standard; peptide; 13 AA.
 XX AC ABG62860;
 XX DT 21-AUG-2002 (first entry)

xx DE ABP52344 standard; peptide; 13 AA.
 XX ID ABG62860 standard; peptide; 13 AA.
 XX AC ABG62860;
 XX DT 21-AUG-2002 (first entry)

xx DE ABP52344 standard; peptide; 13 AA.
 XX ID ABG62860 standard; peptide; 13 AA.
 XX AC ABG62860;
 XX DT 21-AUG-2002 (first entry)

PA (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX
 XX PF 28-JAN-2002; 2002WO-GB000354.
 PA XX PI 26-JAN-2001; 2001GB-00002145.
 PA (SCAN-) SCANCELL LTD
 (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 Durrant LG, Parsons T, Robins A;
 WPI: 2002-608418/65.

PT Use of polypeptides and nucleic acids encoding the polypeptides, in
 PT manufacturing medicament for stimulating a cytotoxic T cell response and
 PT for preventing or treating cancer, e.g. colorectal, lung, breast or
 PT ovarian cancer.
 XX DR Example 11; Page 32; 87pp; English.

PT Use of polypeptides and nucleic acids encoding the polypeptides, in
 PT manufacturing medicament for stimulating a cytotoxic T cell response and
 PT for preventing or treating cancer, e.g. colorectal, lung, breast or
 PT ovarian cancer.
 XX DR Example 11; Page 45; 87pp; English.

PT The present invention describes the use of a polypeptide (I) in the
 PT manufacture of a medicament for stimulating a cytotoxic T cell response,
 PT where (I) comprises a first portion comprising the part of human FC that
 PT binds to CD64 and a second portion comprising one or more heterologous T
 PT cell epitopes. Also described is a method of stimulating a cytotoxic T
 PT cell response in a patient such as a mammal, preferably human, by
 PT administering (I) to the patient. (I) has cyrostatic activity and can be
 PT used in vaccine production (I) and the nucleic acid encoding (I) are
 PT useful in the manufacture of a medicament for stimulating cytotoxic T
 PT cell epitopes. The medicament is useful for preventing and/or treating
 PT cancer, e.g. colorectal, lung, breast, gastric or ovarian cancer. The
 PT medicament stimulates cytotoxic and helper T cell responses. The
 PT antibodies are useful as vaccines to stimulate helper and cytotoxic T
 PT cell responses. The polypeptides and nucleic acids are useful in
 PT optimising immunisation schedules for enhancing a protective immune
 PT response against cancer. The present sequence represents a TH epitope
 PT which is used in an example from the present invention.
 XX SQ Sequence 13 AA;

Query Match 1 TPPAYRPPNAPIL 13
 Best Local Similarity 100.0%; Score 74; DB 5; Length 13;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 RESULT 17
 ABP52350
 ID ABP52350 standard; peptide; 13 AA.
 XX AC ABP52350;
 XX AC ABP52350;
 XX DT 17-OCT-2002 (first entry)

Query 1 TPPAYRPPNAPIL 13
 Best Local Similarity 100.0%; Score 74; DB 5; Length 13;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 RESULT 16
 ABP52307
 ID ABP52307 standard; peptide; 13 AA.
 XX AC ABP52307;
 XX OS Homo sapiens.
 XX OS Synthetic.
 XX PR WO200258728-A2.
 XX OS T helper epitope.
 KW Cytotoxic T lymphocyte; CTL; T helper; MAGE3; cytotoxic T cell response;
 KW tumour; immune response; cancer; vaccine.
 XX PA 01-AUG-2002.
 XX PA 28-JAN-2002; 2002WO-GB000354.
 XX PR 26-JAN-2001; 2001GB-00002145.
 XX PA (SCAN-) SCANCELL LTD.
 (CANC-) CANCER RES CAMPAIGN TECHNOLOGY.
 XX PA 01-AUG-2002.
 XX PR 28-JAN-2002; 2002WO-GB000354.
 XX PR 26-JAN-2001; 2001GB-00002145.
 XX DR WPI: 2002-608418/65.

PT Use of polypeptides and nucleic acids encoding the polypeptides, in
 PT

manufacturing medicament for stimulating a cytotoxic T cell response and for preventing or treating cancer, e.g. colorectal, lung, breast or ovarian cancer.

PT Example 11; Page 46; 87pp; English.

PT The present invention describes the use of a polypeptide (I) in the CC manufacture of a medicament for stimulating a cytotoxic T cell response, where (I) comprises a first portion comprising the part of human FC that binds to CD64 and a second portion comprising one or more heterologous T cell epitopes. Also described is a method of stimulating a cytotoxic T cell response in a patient such as a mammal, preferably human, by administering (I) to the patient. (I) has cytostatic activity and can be used in vaccine production. (I) and the nucleic acid encoding (I) are useful in the manufacture of a medicament for stimulating cytotoxic T cell response. The medicament is useful for preventing and/or treating cancer, e.g. colorectal, lung, breast, gastric or ovarian cancer. The CC antibodies are useful as vaccines to stimulate helper and cytotoxic T cell responses. The polypeptides and nucleic acids are useful in optimising immunisation schedules for enhancing a protective immune response against cancer. The present sequence represents a TH epitope which is used in an example from the present invention

XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 5; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0017;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

Db 1 TPPAYRPPNAPIL 13

RESULT 18

ABP51503 ID ABP51503 Standard; Peptide; 13 AA.

XX AC ABP51503;

XX DT 11-SEP-2002 (first entry)

XX DE T helper epitope HBC 128-140 peptide 875.23.

XX KW Hepatitis B virus; HBV; antigen; major histocompatibility complex; MHC; cytotoxic T cell; helper T cell; virucide; hepatotropic; immunogenic; cytotoxic T lymphocyte; CTL; HLA-restricted response.

XX OS Synthetic.

XX PN US6322789-B1.

XX PD 27-NOV-2001.

XX PP 05-JUN-1995; 95US-00464496.

XX PR 26-AUG-1991; 91US-00749568.

PR 29-JAN-1992; 92US-00827682.

PR 27-APR-1992; 92US-00874491.

PR 26-AUG-1992; 92US-00935811.

XX PA (EPIM-) BIIMMUNE INC.

XX PI Vitiello MA, Chestnut RW;

XX DR WPI; 2002-497942/53.

PT Immunogenic compositions for protecting against hepatitis B virus infection.

XX Example 4; Col 13; 49pp; English.

CC The invention relates to a novel immunogenic composition comprising a peptide that binds to an Major Histocompatibility Complex (MHC) class I molecule to form a complex recognised by a cytotoxic T cell, and a second PS peptide that binds to an MHC class II molecule to form a complex XX recognised by a helper T cell (a group in the first peptide comprises a PS CC peptide and nucleocapsid antigens, are particularly useful in the CC and hepatotropic activity. The composition of the invention has virucide CC and hepatotropic activity. The cytotoxic T lymphocyte (CTL)-stimulating CC peptides induce HLA-restricted responses to hepatitis B virus (HBV) CC antigens. The peptides, derived from CTL group regions of both HBV CC surface and nucleocapsid antigens, are particularly useful in the CC treatment and prevention of HBV infection, including the treatment of CC chronically infected HBV carriers. The peptides are also useful in CC diagnostic methods, such as predicting which HBV-infected individuals are CC prone to developing chronic infection. The sequences shown in ABP51485- CC ABP559 are peptides used for the production of the immunogenic CC composition of the invention

XX SQ Sequence 13 AA;

Query Match 100.0%; Score 74; DB 5; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0017;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

Db 1 TPPAYRPPNAPIL 13

RESULT 19

ABR44095 ID ABR44095 Standard; Peptide; 13 AA.

XX AC ABR44095;

XX DT 04-AUG-2003 (first entry)

XX DE HBV core peptide fragment (residues 128-140).

XX KW HIV-1; immunogenic; anti-HIV; anti-tumour; HBV; helper peptide.

XX OS Hepatitis b virus.

XX PN WO2003029285-A2.

XX PD 10-APR-2003.

XX PR 27-SEP-2002; 2002WO-1B004576.

XX PR 28-SEP-2001; 2001CA-02357906.

XX PA (INSP) INST PASTEUR.

XX PA (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

XX PI Cardinaud S, Habel A, Langlade-Demoyen P, Lemonnier P;

XX WPI; 2003-457225/43.

XX PT Novel purified immunogenic Peptide derived from HIV-1 antigen, for PT preventing and/or treating HIV-1 infections, for priming human CD8 cells PT in vitro, or for detecting early cytotoxic T lymphocyte response against HIV-1.

XX PS Example 1; Page 14; 51pp; English.

CC The invention relates to purified immunogenic peptide derived from a CC human immunodeficiency virus 1 (HIV-1) antigen. The immunogenic peptide, CC encoding polynucleotide and specific antibodies are useful for priming CC human CD8 cells in vitro. The peptide is useful in a diagnostic method CC for detecting an early CTL response against HIV-1, by providing a CC tetrameric complex comprising the peptide, incubating the complex with CC peripheral blood lymphocytes of the subject, and determining the presence CC of HIV-1 specific CTL. The peptide and polynucleotide are useful for CC stimulating ex vivo a human immune response against HIV-1. A CC

CC pharmaceutical composition comprising the peptide or its functional derivatives useful as an anti-HIV agent or for the preparation of an anti-HIV vaccine. The peptide and encoding polymucleotide are useful for preventing and/or treating HIV-1 infections, or for producing specific antibodies. They are also useful as an anti-tumoural agent. The present sequence represents a HBV core peptide fragment used as a helper peptide

XXX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 6; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0017; Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

Db 1 TPPAYRPPNAPIL 13

Search completed: April 19, 2006, 19:27:53

Job time : 189 secs

RESULT 20

ID ABP98778 standard; Peptide: 13 AA.

XX ABP98778

AC

XX DT 27-JUN-2003 (first entry)

XX DB HBV core antigen corresponding to amino acids 128-140.

XX KW immunostimulant; cytostatic; nootropic; vaccine; human;

XX KW neuroprotective; peptide therapy; cell therapy; immunogen; nucleoprotein;

XX KW small-cell lung cancer; neuroblastoma; sarcoma; vaccine.

OS Hepatitis B virus.

XX PN CA2387391-A1.

XX PD 08-NOV-2002.

XX PF 08-MAY-2002; 2002CA-02387391.

XX PR 08-MAY-2001; 2001CA-02344768.

XX (INRM) INSERM INST NAT SANTE & RECH MEDICALE.

PA (INSP) INST PASTEUR.

PA (ASSI-) ASSISTANCE PUBLIQUE HOPITAUX PARIS.

XX PI Bourguin-Pilonquet A, Langlade-Demoyen P, Gherardi RK, Farcet J;

PI Garcia-Pons F;

XX DR 2003-314131/31.

XX PS Page 13; 52pp; English.

PT New purified immunogenic Hu antigen peptide for use in a vaccine to induce an immune response against a cancerous cell in a subject, for treating e.g. autologous or syngenic small-cell lung cancer or a nervous system disease.

XX Disclosure: Page 13; 52pp; English.

CC The invention relates to new purified immunogenic peptides derived from the Hu antigen, a family of nucleoprotein of size 35-40 kD. The sequence is used to generate a number of peptides comprising fragments of the Hu antigen. The peptides are used to induce an immune response against a cancerous cell, especially small-cell lung cancers, neuroblastomas, ex

CC sarcoma or prostate carcinoma. The immune response is an in vitro, ex vivo and/or in vivo CD8 T-lymphocytes (CTL) response. The administration of the peptides to an HLA-A2.1 human induces the activation of a specific

CC CTL response against autologous or syngenic small-cell lung cancer (SCLC). The sequences can be used as an antitumoral vaccine, for the treatment or prevention of HLA-A2.1 human SCLC and/or nervous system

CC damage diseases. An animal model is used for selecting therapeutic

CC molecules capable of inducing an immune response in vivo against the peptide. The peptides induce an immune response against a cancerous cell

CC without inducing an immune response against non-cancerous cells of a

CC mammal, preferably a human. The peptides are shown in records ABP98764-
CC ABP98776. This sequence corresponds to a fragment of the hepatitis B
CC virus core protein comprising amino acids 128-140. The peptide is used as
CC a control in MHC binding and stabilisation assays
XX Sequence 13 AA;

Query Match 100.0%; Score 74; DB 6; Length 13;

Best Local Similarity 100.0%; Pred. No. 0.0017;

Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

Db 1 TPPAYRPPNAPIL 13

GenCore version 5.1.7
Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 19:28:11 ; Search time 38 Seconds
(without alignments)
32.916 Million cell updates/sec

Title: US-09-277-064-9
Perfect score: 74
Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62
Gap0 10.0 , Gapext 0.5

Searched: 283416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters:

1828

Minimum DB seq length: 0
Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing First 75 summaries

Database : PIR 80:*

1: Pir1:*

2: Pir2:*

3: Pir3:*

4: Pir4:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB ID	Description
1	29	39.2	11	1	XAVIBH	bradykinin-potentiating peptide - halys viper
2	29	39.2	12	2	S71380	lebetin 1 isoform
3	29	39.2	13	2	S09716	2S albumin large C
4	29	39.2	13	2	S21152	tryptophyllin-rla
5	24	32.4	13	2	G37266	Ig heavy chain C r
6	23	31.1	9	2	S65433	bradykinin - horn
7	23	31.1	9	2	A43065	hydroxyproline-1-b
8	23	31.1	9	2	B60246	ornitho-kinin - ch
9	23	31.1	9	2	A26744	bradykinin-like pe
10	23	31.1	9	2	A61057	Thr-6 bradykinin -
11	23	31.1	9	2	A60579	bradykinin-like pe
12	23	31.1	9	2	A61363	bradykinin - commo
13	23	31.1	9	2	A61358	bradykinin-like pe
14	23	31.1	11	2	S13279	Ile-Ser-bradykinin -
15	23	31.1	11	2	B26744	megacosmakinin -
16	23	31.1	11	2	A61365	phyllokinin - Rohd
17	23	31.1	12	2	A61336	vespakinin M - hor
18	23	31.1	12	2	A61359	vespakinin X - hor
19	23	31.1	13	2	A61361	bradykinin-like pe
20	22	29.7	10	2	S39030	lysyl-bradykinin -
21	22	29.7	11	2	I33098	173K exoantigen -
22	22	29.7	12	2	B33690	neural cell adhesi
23	22	29.7	12	2	PN046	ATP synthase D cha
24	22	29.7	13	2	D39690	neural cell adhesi
25	22	29.7	13	2	A05174	tryptophyllin-13 -
26	21	28.4	7	2	A61081	collagen alpha 1(V
27	21	28.4	10	2	S26506	endoglycosidase
28	20	27.0	8	2	B39745	disimilatory sulf
29	20	27.0	9	2	S63491	

RESULT 1

XAVIBH

bradykinin-potentiating peptide - halys viper

N;Alternate names: BPP

C;Species: Agkistrodon halys (halys viper)

C;Date: 30-Sep-1988 #sequence revision 30-Sep-1988 #text_change 09-Jul-2004

R;Chi, C.W.; Wang, S.Z.; Xu, L.G.; Wang, M.Y.; Lo, S.S.; Huang, W.D.

C;Comment: Because this peptide both inhibits the activity

of the angiotensin-converti

ng enzyme inhibitor; antihypertensive; bradykinin; py;

C;Superfamily: bradykinin-potentiating Peptide

Peptides 6, 339-342, 1985

A;Title: Structure-function studies on the bradykinin potentiating peptide from Chine-

A;Reference number: JC0002; PMID:86177022; MUID:3008123

A;Accession: JC0002

A;Molecule type: peptide

A;Residues: 1-11 <CHI>

A;Cross-references: UNIPROT:P04562; UNIPARC:UPI000126A96

C;Comment: Because this peptide both inhibits the activity

of the angiotensin-converti

ng enzyme inhibitor; antihypertensive; bradykinin; py;

F;1/Modified site: pyrrolidone carboxylic acid (Gin) #status experimental

Query Match Score 29; DB 1%; Length 11;
Best Local Similarity 71.4%; Pred. No. 1.2e-02;

Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0; C;Species: Phyllomedusa bicolor (two-colored leaf frog)
C;Date: 19-Mar-1997 #sequence_revision 19-Mar-1997 #text_change 16-Aug-2004
C;Accession: S21152
R;Mignogna, G.; Severini, C.; Simmaco, M.; Negri, L.; Falconieri Ersbamer, G.; Kreil, P;BBS Lett. 302, 151-154, 1992
A;Title: Identification and characterization of two dermorphines from skin extracts of A;Reference number: S21152; PMID:32339502; PMID:1633846
A;Accession: S21152
A;Molecule type: protein
A;Residues: 1-13 <MIG>
A;Cross-references: UNIPROT:Q7L251; UNIPARC:UPI000017A4F6
A;Experimental source: skin

Query Match 39.2%; Score 29; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.4e+02;
Matches 5; Conservative 1; Mismatches 4; Indels 0; Gaps 0;
Qy 3 PAYRPNAPI 12
Db 4 .PFYPPPIYPV 13

RESULT 5
G37266
Ig heavy chain C region (Py2) - mouse (fragment)
C;Species: Mus musculus (house mouse)
C;Date: 19-Mar-1998 #sequence_revision 13-Mar-1998 #text_change 13-Mar-1998
C;Accession: G37266
R;Ruff-Jamison, S.; Campos-Gonzalez, R.; Glenney Jr., J.R.
J. Biol. Chem. 266, 6607-6613, 1991
A;Title: Heavy and light chain variable region sequences and antibody properties of ar
A;Reference number: A38740; PMID:91177933; PMID:1706720
A;Accession: G37266
A;Status: Preliminary
A;Molecule type: mRNA
A;Residues: 1-13 <RUF>
A;Cross-references: UNIPARC:UPI000017CC6E

Query Match 32.4%; Score 24; DB 2; Length 13;
Best Local Similarity 57.1%; Pred. No. 7.8e+02;
Matches 4; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
Qy 1 TPPAYRP 7
Db 4 TPPSQVP 10

RESULT 6
S65413
bradykinin - horn fly (fragment)
C;Species: Haematobia irritans (horn fly)
C;Date: 28-Oct-1996 #sequence_revision 13-Mar-1997 #text_change 13-Mar-1997
C;Accession: S65433
R;Wijffels, G.; Fitzgerald, C.; Gough, J.; Riding, G.; Elvin, C.; Kemp, D.; Willadsen, Eur. J. Biochem. 237, 414-423, 1996
A;Title: Cloning and characterisation of angiotensin-converting enzyme from the dipter
A;Accession number: S65331; PMID:36215437; PMID:647080
A;Accession: S65433
A;Status: Preliminary
A;Molecule type: protein
A;Residues: 1-9 <WJ>
A;Cross-references: UNIPARC:UPI000002CF4A
A;Note: the source is designated as *Haematobia irritans exigua*

Query Match 31.1%; Score 23; DB 2; Length 9;
Best Local Similarity 50.0%; Pred. No. 2.8e+05;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
Qy 2 PPAYRP 7
Db 2 PPGFSP 7

RESULT 7
S21152
tryptophyllin-related peptide - two-colored leaf frog

RESULT 7
 A43065 hydroxyproline-3-bradykinin - frog (Helleophryne purcelli)
 C;Species: Helleophryne purcelli
 C;Accession: A43065
 C;Date: 07-Oct-1994 #sequence_revision 07-Oct-1994 #text_change 09-Jul-2004
 R;Nakajima, T.; Yasuhara, T.; Erspamer, G.F.; Visser, J.
 R;Occurrence of HYP(3)-bradykinin in methanol extracts of the skin of the South American
 A;Title: Occurrence of HYP(3)-bradykinin in methanol extracts of the skin of the South American
 A;Accession: A43065
 A;Molecule type: protein
 A;Residues: 1-9 <NAK>
 A;Cross-references: UNIPROT:Q7217; UNIPARC:UPI000002CF4A
 C;Keywords: bradykinin; hydroxyproline; skin
 P;3/Modified site: hydroxyproline (Pro) #status experimental

Query Match Score 33; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 8
 B60246 ornitho-kinin - chicken
 C;Species: Gallus gallus (chicken)
 C;Accession: B60246
 R;Kimura, M.; Sueyoshi, T.; Morita, T.; Tanaka, K.; Iwanaga, S.
 A;Adv. Exp. Med. Biol. 247A, 359-367, 1989
 A;Title: Ornitho-kininogen and ornitho-kinin: isolation, characterization and chemical
 A;Reference number: A60246; PMID:90102072; MUID:2603803
 A;Accession: B60246
 A;Status: Preliminary
 A;Molecule type: protein
 A;Residues: 1-9 <KIM>
 A;Cross-references: UNIPROT:Q7LZ50; UNIPARC:UPI000017A4F8

Query Match Score 33; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 9
 A26744 bradykinin-like peptide - garden dagger wasp
 N;Alternate names: Thio-6-bradykinin
 C;Species: Megacolla flavifrons (Garden dagger wasp)
 C;Accession: A26744
 R;Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
 R;Toxin 25, 527-535, 1987
 A;Title: Two kinins isolated from an extract of the venom reservoirs of the solitary wasp
 A;Reference number: A94322; MUID:87293024; PMID:3617088
 A;Accession: A26744
 A;Molecule type: protein
 A;Residues: 1-9 <YAS>
 A;Cross-references: UNIPARC:UPI000012DF29

Query Match Score 33; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7

RESULT 10
 A61057 Thr-6 bradykinin - scoliid wasp (Colpa interrupta)
 C;Species: Colpa interrupta
 C;Accession: A61057
 R;Piek, T.; Hue, B.; Mantel, P.; Nakajima, T.; Peltiere, M.; Yasuhara, T.
 Comp. Biochem. Physiol. C 96, 157-162, 1990
 A;Title: Threonine(6)-bradykinin in the venom of the wasp Colpa interrupta (P.) presy
 A;Reference number: A61057; MUID:91130217; PMID:1980872
 A;Accession: A61057
 A;Molecule type: protein
 A;Residues: 1-9 <PIE>
 A;Cross-references: UNIPARC:UPI000012DF29
 C;Keywords: bradykinin; presynaptic neurotoxin; venom

Query Match Score 31.1%; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 11
 A60579 bradykinin-like peptide - slider turtle
 C;Species: Pseudemys scripta (Slider)
 C;Accession: A60579
 R;Conlon, J.M.; Hicks, J.W.; Smith, D.D.
 Endocrinology 126, 985-991, 1990
 A;Title: Isolation and biological activity of a novel kinin ([Thr(6)]bradykinin) from
 A;Reference number: A60579; MUID:90126625; PMID:2298179
 A;Accession: A60579
 A;Molecule type: protein
 A;Residues: 1-9 <CON>
 A;Cross-references: UNIPARC:UPI000012DF29
 C;Comment: This peptide increases aortic blood flow but, unlike bradykinin in mammal
 C;Keywords: plasma

Query Match Score 31.1%; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 12
 A61363 bradykinin - common frog
 C;Species: Rana temporaria (common frog)
 C;Accession: A61363
 R;Anastasi, A.; Eramer, V.; Bertaccini, G.
 Comp. Biochem. Physiol. A 14, 43-52, 1965
 A;Title: Occurrence of bradykinin in the skin of Rana temporaria.
 A;Reference number: A61363
 A;Accession: A61363
 A;Status: Preliminary
 A;Molecule type: protein
 A;Residues: 1-9 <NA>
 A;Cross-references: UNIPROT:Q7LZJ8; UNIPARC:UPI000002CF4A

Query Match Score 31.1%; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 13
 A61358
 bradykinin-like peptide I - Japanese pond frog
 C;Species: *Rana nigromaculata* (Japanese pond frog)
 C;Date: 09-Sep-1994 #sequence_revision 03-Sep-1994 #text_change 05-Oct-2004
 C;Accession: A61358
 R; Nakajima, T.
 Chem. Pharm. Bull. 16, 769-770, 1968
 A;Title: Occurrence of a new active peptide on smooth muscle and bradykinin in the skin
 A;Reference number: A61358; PMID:68412013; PMID:5677638
 A;Accession: A61358
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 1-9 <NAK>
 A;Cross-references: UNIPROT:Q7L254; UNIPARC:UPI000017A4F0
 C;Keywords: skin

Query Match 31.1%; Score 23; DB 2; Length 9;
 Best Local Similarity 50.0%; Pred. No. 2.8e+05;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 14
 S13279
 Ile-Ser-bradykinin - human (fragment)
 N;Alternative name: T-kinin
 C;Species: *Homo sapiens* (man)
 C;Date: 02-Dec-1993 #sequence_revision 13-Mar-1997 #text_change 09-Jul-2004
 C;Accession: S13279
 R;Wunderer, B.; Walter, I.; Eschenbacher, B.; Lang, M.; Kellermann, J.; Kindermann, G.
 Biol. Chem. Hoppe-Seyler 371, 977-981, 1990
 A;Title: Ile-Ser-bradykinin is an aberrant permeability factor in various human malignan
 A;Reference number: S13279; PMID:91166748; PMID:2076202
 A;Accession: S13279
 A;Molecule type: protein
 A;Residues: 1-11 <WNS>
 A;Cross-references: UNIPROT:Q7M4P1; UNIPARC:UPI0000148EBE
 C;Keywords: bradykinin

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 50.0%; Pred. No. 9.1e+02;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 4 PPGFSP 9

RESULT 15
 B26744
 megascoliakinin - garden dagger wasp
 N;Alternative name: 6-Thr-bradykinin-Lys-Ala
 C;Species: *Megascolia flavifrons* (garden dagger wasp)
 C;Accession: B26744; A28609
 R;Yasuhara, T.; Mantel, P.; Nakajima, T.; Piek, T.
 Toxicon 25, 525-535, 1987
 A;Title: Two kinins isolated from an extract of the venom reservoirs of the solitary wasp
 A;Reference number: A94322; PMID:87293024; PMID:3617088
 A;Accession: B26744
 A;Molecule type: protein
 A;Residues: 1-11 <YAS>

A;Cross-references: UNIPROT:P12797; UNIPARC:UPI0000126AD6
 R;Nakajima, T.; Piek, T.; Yasuhara, T.; Mantel, P.
 Toxicon 26, 34, 1986
 A;Title: Two kinins isolated from the venom of *Megascolia flavifrons*.
 A;Reference number: A28609
 A;Accession: A28609
 A;Molecule type: protein
 A;Residues: 1-11 <NAK>
 A;Cross-references: UNIPARC:UPI0000126AD6
 C;Keywords: bradykinin; presynaptic neurotoxin; venom

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 50.0%; Pred. No. 9.1e+02;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 16
 A61365
 phyllokinin - Röhde's leaf frog
 N;Alternative name: bradykinin-isooleucyl-tyrosine O-sulfate
 C;Species: *Phyllomedusa rohdei* (Röhde's leaf frog)
 C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
 C;Accession: A61365
 R;Anastasi, A.; Bertaccini, G.; Espanmer, V.
 Br. J. Pharmacol. 27, 479-485, 1966
 A;Title: Pharmacological data on phyllokinin (bradykinin-isooleucyl-tyrosine O-sulfate
 A;Reference number: A61365; PMID:5970895
 A;Accession: A61365
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 1-11 <ANA>
 A;Cross-references: UNIPROT:Q7L252; UNIPARC:UPI000017A4F2
 C;Keywords: sulfoprotein
 F;1;Binding site: sulfate (Tyr) (covalent) #status experimental

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 50.0%; Pred. No. 9.1e+02;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 2 PPGFSP 7

RESULT 17
 A61360
 vespakinin M - hornet (Vespa mandarinia)
 C;Species: Vespa mandarinia
 C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
 C;Accession: A61360
 R;Kishimura, H.; Yasuhara, T.; Yoshida, H.; Nakajima, T.
 Chem. Pharm. Bull. 24, 2896-2897, 1976
 A;Title: Vespakinin-M, a novel bradykinin analogue containing hydroxyproline, in the
 A;Reference number: A61360; PMID:77114342; PMID:1017116
 A;Accession: A61360
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 1-12 <KIS>
 A;Cross-references: UNIPROT:Q7M3T3; UNIPARC:UPI000017A4F3
 C;Keywords: hydroxyproline; venom
 F;4;Modified site: 4-hydroxyproline (Pro) #status experimental

Query Match 31.1%; Score 23; DB 2; Length 12;
 Best Local Similarity 50.0%; Pred. No. 1e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 Db 3 PPGFSP 8

RESULT 18

A61359
vespakinin X - hornet (Vespa xanthoptera)
C;Species: Vespa xanthoptera
C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C;Accession: A61359
R;Yasuhara, T.; Yoshiida, H.; Nakajima, T.
Chem. Pharm. Bull. 25, 936-941, 1977
A;Title: Chemical investigation of the hornet (Vespa xanthoptera Cameron) venom. The structure
A;Reference number: A61359; MUID:87187853; PMID:264186
A;Accession: A61359
A;Status: Preliminary
A;Molecule type: Protein
A;Residues: 1-12 <YAS>
A;Cross-references: UNIPROT:Q7M3T2; UNIPARC:UPI000017A4F4
C;Keywords: venom

Query Match 31.1%; Score 23; DB 2; Length 12;
Best Local Similarity 50.0%; Pred. No. 1e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
| :
Db 3 PPGFSP 8

RESULT 19

A61361
bradykinin-like Peptide - Bombina orientalis
C;Species: Bombina orientalis
C;Date: 09-Sep-1994 #sequence_revision 09-Sep-1994 #text_change 05-Oct-2004
C;Accession: A61361
R;Yasuhara, T.; Hira, M.; Nakajima, T.; Yanaihara, N.; Yanaihara, C.; Hashimoto, T.; Sakai, T.; Chem. Pharm. Bull. 21, 1388-1391, 1973
A;Title: Active peptides on smooth muscle in the skin of Bombina orientalis Bouenger and their pharmacological properties
A;Reference number: A61361; MUID:73256822; PMID:473297
A;Accession: A61361
A;Status: Preliminary
A;Molecule type: Protein
A;Residues: 1-13 <YAS>
A;Cross-references: UNIPROT:P83060; UNIPARC:UPI000017A4F5
C;Keywords: skin

Query Match 31.1%; Score 23; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
| :
Db 2 PPGFSP 7

RESULT 20

S39030
lysyl-bradykinin - rainbow trout
C;Species: Oncorhynchus mykiss (rainbow trout)
C;Date: 19-May-1994 #sequence_revision 19-Apr-1996 #text_change 16-Aug-2004
C;Accession: S39030
R;Conlon, J.M.; Olson, K.R.
FEBS Lett. 334, 75-78, 1993
A;Title: Purification of a vasoactive peptide related to lysyl-bradykinin from trout plasma
A;Reference number: S39030; MUID:94039817; PMID:8224232
A;Accession: S39030
A;Status: Preliminary
A;Molecule type: Protein
A;Residues: 1-10 <CON>
A;Cross-references: UNIPROT:Q9PRZ1; UNIPARC:UPI0000126AD7

Query Match 29.7%; Score 22; DB 2; Length 10;
Best Local Similarity 50.0%; Pred. No. 1.1e+03;
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: April 19, 2006, 19:24:59 ; Search time 232 Seconds

(without alignment)

39.534 Million cell updates/sec.

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 2166443 seqs, 705528306 residues

Post-processing: Minimum Match 0%

Maximum Match 100%
Listing first 75 summaries

Database : UniProt_05_80_*

1: uniprot_sprot:*

2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query	Score	Match	Length	DB	ID	Description
1	29	39.2	11	1	BPP_AKGHP	P04562 agkistrodon	
2	29	39.2	12	2	Q7LZ10_VIPLE	P045620 visera lebe	
3	29	39.2	13	2	Q7LZ51_HYBII	Q71251 phylomedus	
4	26	35.1	11	2	Q8WII_9MURI	Q8wii1 mus sp. nt-	
5	25	33.8	10	2	Q8WE86_HUMAN	Q8we86 homo sapien	
6	24	32.4	7	1	TPY_PACDA	P83455 pachymedusa	
7	23	31.1	8	1	PPK2_PERAM	P826920 periplaneta	
8	23	31.1	8	2	Q699U0_BETVU	Q699j0 bera vulgar	
9	23	31.1	9	1	BRK1_RANNI	Q71254 rana nigrom	
10	23	31.1	9	1	KN13_BONVA	P83058 bombina var	
11	23	31.1	9	1	KNL3_CYPDO	P83659 cyphonoxy	
12	23	31.1	9	2	P84497_TRAISC	P84497 trachemys s	
13	23	31.1	9	2	Q7LZ50_CHICK	Q71250 gallus gall	
14	23	31.1	9	2	Q7LZB8_RANTE	Q71218 rana tempor	
15	23	31.1	9	2	Q7LZ17_9NEOB	Q71217 haleophryne	
16	23	31.1	11	1	BRKP_PHYRO	Q71252 phylomedus	
17	23	31.1	11	1	BRK_MEGFL	P12797 megascopis	
18	23	31.1	11	2	Q712U2_HUMAN	Q712u2 homo sapien	
19	20	31.1	11	2	Q7M4P1_HUMAN	Q7m4p1 homo sapien	
20	20	31.1	11	2	Q712U0_RAT	Q712u0 rattus norv	
21	23	31.1	11	2	Q712U1_MOUSE	Q712u1 mus musculus	
22	23	31.1	12	1	GRAR_RANRU	P40754 rana rugosa	
23	23	31.1	12	1	VESP_VESMA	Q7m313 vespa manda	
24	23	31.1	12	1	VESP_VESXA	Q7m312 vespa xanth	
25	23	31.1	12	2	Q9PSW5_CHICK	Q9psw5 gallus gall	
26	23	31.1	13	1	BRK_PARID	P42717 parapolybia	
27	22	29.7	8	2	Q4V604_MANSE	Q4v604 manduca sex	
28	22	29.7	9	2	Q9UCS8_TOBAC	Q9ucs8 homo sapien	
29	22	29.7	9	2	P82429_TOBAC	P82429 nicotiana t	
30	22	29.7	9	2	Q9PRJ4_LIEPOS	Q9prj4 lepisosteus	
31	22	29.7	10	1	BRK_ONCMLY	Q9prz1 oncorhynchus	

Total number of hits satisfying chosen parameters: 5897

Minimum DB seq length: 0

Maximum DB seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Database : UniProt_05_80_*

1: uniprot_sprot:*

2: uniprot_trembl:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Query	Score	Match	Length	DB	ID	Description
1	29	39.2	11	1	BPP_AKGHP	P04562 agkistrodon	
2	29	39.2	12	2	Q7LZ10_VIPLE	P045620 visera lebe	
3	29	39.2	13	2	Q7LZ51_HYBII	Q71251 phylomedus	
4	26	35.1	11	2	Q8WII_9MURI	Q8wii1 mus sp. nt-	
5	25	33.8	10	2	Q8WE86_HUMAN	Q8we86 homo sapien	
6	24	32.4	7	1	TPY_PACDA	P83455 pachymedusa	
7	23	31.1	8	1	PPK2_PERAM	P826920 periplaneta	
8	23	31.1	8	2	Q699U0_BETVU	Q699j0 bera vulgar	
9	23	31.1	9	1	BRK1_RANNI	Q71254 rana nigrom	
10	23	31.1	9	1	KN13_BONVA	P83058 bombina var	
11	23	31.1	9	1	KNL3_CYPDO	P83659 cyphonoxy	
12	23	31.1	9	2	P84497_TRAISC	P84497 trachemys s	
13	23	31.1	9	2	Q7LZ50_CHICK	Q71250 gallus gall	
14	23	31.1	9	2	Q7LZB8_RANTE	Q71218 rana tempor	
15	23	31.1	9	2	Q7LZ17_9NEOB	Q71217 haleophryne	
16	23	31.1	11	1	BRKP_PHYRO	Q71252 phylomedus	
17	23	31.1	11	1	BRK_MEGFL	P12797 megascopis	
18	23	31.1	11	2	Q712U2_HUMAN	Q712u2 homo sapien	
19	20	31.1	11	2	Q7M4P1_HUMAN	Q7m4p1 homo sapien	
20	20	31.1	11	2	Q712U0_RAT	Q712u0 rattus norv	
21	23	31.1	11	2	Q712U1_MOUSE	Q712u1 mus musculus	
22	23	31.1	12	1	GRAR_RANRU	P40754 rana rugosa	
23	23	31.1	12	1	VESP_VESMA	Q7m313 vespa manda	
24	23	31.1	12	1	VESP_VESXA	Q7m312 vespa xanth	
25	23	31.1	12	2	Q9PSW5_CHICK	Q9psw5 gallus gall	
26	23	31.1	13	1	BRK_PARID	P42717 parapolybia	
27	22	29.7	8	2	Q4V604_MANSE	Q4v604 manduca sex	
28	22	29.7	9	2	Q9UCS8_TOBAC	Q9ucs8 homo sapien	
29	22	29.7	9	2	P82429_TOBAC	P82429 nicotiana t	
30	22	29.7	9	2	Q9PRJ4_LIEPOS	Q9prj4 lepisosteus	
31	22	29.7	10	1	BRK_ONCMLY	Q9prz1 oncorhynchus	

22 29.7 TY13 PHYRO

32 21.5 PB2441 nicotiana t

33 21.5 QM2n0 bos taurus

34 21.5 QPK01 homo sapien

35 21.5 Q9148 sun scrobofry

36 21.5 P83289 arthrobrotula

37 21.5 Q9ud66 homo sapien

38 21.5 Q43174 solanum tub

39 21.5 P90442 spodoptera

40 21.5 P42985 leptinotarsa

41 20.0 P19425 aegyptiaca

42 20.0 Q8rjf1 pseudomonas

43 20.0 Q60hp3 xyrichtys d

44 20.0 Q61574 ostercagia

45 20.0 Q64313 rattus norv

46 20.0 Q80xv4 rattus norv

47 20.0 Q87604 SLCV

48 20.0 Q34966 cavia porosa

49 19.0 Q7m151 9BACT

50 19.0 Q82622 9CORY

51 19.0 Q8p8p BOTIN

52 19.0 Q30426 bothrops in

53 19.0 P17339 morganella

54 19.0 Q7sc70 NEURO

55 19.0 Q712L8 HUMAN

56 19.0 Q8CJE0 RAT

57 19.0 Q90348 9FLAV

58 19.0 Q8JV66 polyomavirus

59 19.0 Q8JV68 polyomavirus

60 19.0 Q8JV70 POVIC

61 19.0 Q8JV72 POVIC

62 19.0 Q8JV74 POVIC

63 19.0 Q8JV76 polyomavirus

64 19.0 Q8JV80 POVIC

65 19.0 Q8JV82 POVIC

66 19.0 Q9Q0V7 POVIC

67 19.0 Q9Q0V9 POVIC

68 19.0 Q9Q0W1 POVIC

69 19.0 Q9Q0W2 POVIC

70 19.0 Q9Q0W5 POVIC

71 19.0 Q9Q0W7 POVIC

72 19.0 Q9Q0W8 POVIC

73 19.0 Q9Q0X1 POVIC

74 19.0 Q9Q0X3 POVIC

75 19.0 Q9Q0X5 POVIC

ALIGNMENTS

RESULT 1

BPP_AKGHP

STANDARD

PRT;

PRT;

AA.

AC

P04562;

DT

13-AUG-1987

(Rel. 05, Created)

DT

01-JUL-2004

(Rel. 44, Last annotation update)

DT

Bradykinin-potentiating peptide (Angiotensin-converting enzyme inhibitor).

DE

Agkistrodon halys pallas (Chinese water moccasin) (Gloydius halys pallas).

OS

Bukarzoa; Chordata; Craniota; Vertebrata; Buteleostomi;

OC

Lepidosaura; Squamata; Scleroglossa; Serpentes; Colubroidea;

OC

Viperidae; Crotalinae; Gloydius.

OC

NCBI_TaxID=8714;

RN

PROTEIN SEQUENCE.

RC

RX

MEDLINE:86177022; PubMed:30081213;

RA

Chi C.-W., Wang S.-Z., Xu L.-G., Wang M.-Y., Lo S.-S., Huang W.-D.,

RT

RT

from Chinese snake venom (Agkistrodon halys pallas).";

RL

Peptides 6 Suppl. 3:319-342 (1985);

-1- FUNCTION: This peptide both inhibits the activity of the

CC

CC angiotensin-converting enzyme and enhances the action of
CC bradykinin by inhibiting the kinases that inactivate it. It acts as
CC an indirect hypotensive agent.

CC This Swiss-Prot entry is copyright. It is produced through a collaboration
CC between the Swiss Institute of Bioinformatics and the EMBL outstation -
CC the European Bioinformatics Institute. There are no restrictions on its
CC use as long as its content is in no way modified and this statement is not
CC removed.

CC PIR: JC002; XAVIBH.

DR Direct protein sequencing; Hypotensive agent;

KW Pyrrolidone carboxylic acid.

SO MOD RES 1 Pyrrolidone carboxylic acid.
SEQUENCE 11 AA; 1112 MW; 30ABBF177686777 CRC64;

Query Match 39.2%; Score 29; DB 2; Length 11;
Best Local Similarity 71.4%; Pred. No. 1.2e+03; Indels 0; Gaps 0;

Matches 5; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 6 RPPNAPI 12

Db 3 RPPGPP 9

RESULT 2
Q7LZ10_VIPLE
ID Q7LZ10_VIPLE PRELIMINARY; PRT; 12 AA.
AC DT 01-MAR-2004 (TREMBLrel. 26, Created)
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)

DE Lebetin 1 isoform beta.
OS Vipera lebetina (Elephant snake) (Leventine viper).
OC Lepidoauria; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Squamata; Scleroglossa; Serpentes; Colubroidea;
OC Viperidae; Viperinae; Macroviperidae.
RN (1) -TaxID=6709;

RP PROTEIN SEQUENCE
MEDLINE=9614866; PubMed=8769304; DOI=10.1016/0014-5793(96)00774-0;
RA Barbouche R.; Marrakchi N.; Mansuelle P.; Krifii M.; Fenouillet E.,
RA Rochat H.; El Ayeb M.;
RT "Novel anti-platelet aggregation polypeptides from Vipera lebetina
venom: isolation and characterization.";
RL FEBS Lett. 392:6-10(1996).

DR PIR; S71380; S71380
SO SEQUENCE 12 AA; 1248 MW; 2D3CACD53C733327 CRC64;

Query Match 39.2%; Score 29; DB 2; Length 12;
Best Local Similarity 62.5%; Pred. No. 1.4e+03; Indels 0; Gaps 0;

Matches 5; Conservative 0; Mismatches 3; Indels 0; Gaps 0;

Qy 2 PPAYRPPN 9

Db 4 PPXKGPPN 11

RESULT 3
Q7LZ51_PHYBI
ID Q7LZ51_PHYBI PRELIMINARY; PRT; 13 AA.
AC DT 01-MAR-2004 (TREMBLrel. 26, Created)
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
DB Tryptophyllin-related peptide.
OS Phyllomedusa bicolor (Two-colored leaf frog).
OC Amphibia; Batracia; Chordata; Craniata; Vertebrata; Euteleostomi;
OC Phyllomedusinae; Phyllomedusa; Neobatrachia; Hylidae;
OC Phyllomedusinae; Phyllomedusa.
RN (1) -TaxID=8393;
RP PROTEIN SEQUENCE.

RX MEDLINE=92339502; PubMed=1633846; DOI=10.1016/0014-5793(92)80427-1;
RA Mignogna G.; Saverini C.; Siammaco M.; Negri L.,
RA Falconieri Bispamer G.; Kreil G.; Barral D.;
RT "Identification and characterization of two dermorphins from skin
extracts of the Amazonian frog *Phyllomedusa bicolor*."
RL FEBS Lett. 302:151-154 (1992).
DR PIR; S2115; S21152.
SEQUENCE 13 AA; 1575 MW; 094C3A218C5777B CRC64;

Query Match 39.2%; Score 29; DB 2; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.5e+03; Indels 0; Gaps 0;
Matches 5; Conservative 1; Mismatches 4; Indels 0; Gaps 0;

Qy 3 PAYPPNAPI 12
Db 4 PFPYPPPIYPV 13

RESULT 4
Q80W11_9MURI
ID Q80W11_9MURI PRELIMINARY; PRT; 11 AA.
AC Q80W11;
DT 01-JUN-2003 (TREMBLrel. 24, Created)
DT 01-JUN-2003 (TREMBLrel. 24, Last sequence update)
DT 01-JUN-2003 (TREMBLrel. 24, Last annotation update)

Qy 5 YRPNAPIL 13
Db 2 WQPPSARIM 10

RESULT 5
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 6 COL1A1
Db 7 COL1A1

RESULT 6
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 8 COL1A1
Db 9 COL1A1

RESULT 7
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 10 COL1A1
Db 11 COL1A1

RESULT 8
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 12 COL1A1
Db 13 COL1A1

RESULT 9
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 14 COL1A1
Db 15 COL1A1

RESULT 10
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 16 COL1A1
Db 17 COL1A1

RESULT 11
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 18 COL1A1
Db 19 COL1A1

RESULT 12
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 20 COL1A1
Db 21 COL1A1

RESULT 13
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 22 COL1A1
Db 23 COL1A1

RESULT 14
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 24 COL1A1
Db 25 COL1A1

RESULT 15
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 26 COL1A1
Db 27 COL1A1

RESULT 16
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 28 COL1A1
Db 29 COL1A1

RESULT 17
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 30 COL1A1
Db 31 COL1A1

RESULT 18
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 32 COL1A1
Db 33 COL1A1

RESULT 19
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 34 COL1A1
Db 35 COL1A1

RESULT 20
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 36 COL1A1
Db 37 COL1A1

RESULT 21
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 38 COL1A1
Db 39 COL1A1

RESULT 22
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 40 COL1A1
Db 41 COL1A1

RESULT 23
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 42 COL1A1
Db 43 COL1A1

RESULT 24
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 44 COL1A1
Db 45 COL1A1

RESULT 25
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 46 COL1A1
Db 47 COL1A1

RESULT 26
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 48 COL1A1
Db 49 COL1A1

RESULT 27
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 50 COL1A1
Db 51 COL1A1

RESULT 28
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 52 COL1A1
Db 53 COL1A1

RESULT 29
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 54 COL1A1
Db 55 COL1A1

RESULT 30
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 56 COL1A1
Db 57 COL1A1

RESULT 31
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 58 COL1A1
Db 59 COL1A1

RESULT 32
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 60 COL1A1
Db 61 COL1A1

RESULT 33
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 62 COL1A1
Db 63 COL1A1

RESULT 34
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 64 COL1A1
Db 65 COL1A1

RESULT 35
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 66 COL1A1
Db 67 COL1A1

RESULT 36
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 68 COL1A1
Db 69 COL1A1

RESULT 37
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 70 COL1A1
Db 71 COL1A1

RESULT 38
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 72 COL1A1
Db 73 COL1A1

RESULT 39
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 74 COL1A1
Db 75 COL1A1

RESULT 40
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 76 COL1A1
Db 77 COL1A1

RESULT 41
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 78 COL1A1
Db 79 COL1A1

RESULT 42
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 80 COL1A1
Db 81 COL1A1

RESULT 43
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 82 COL1A1
Db 83 COL1A1

RESULT 44
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 84 COL1A1
Db 85 COL1A1

RESULT 45
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 86 COL1A1
Db 87 COL1A1

RESULT 46
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 88 COL1A1
Db 89 COL1A1

RESULT 47
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 90 COL1A1
Db 91 COL1A1

RESULT 48
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 92 COL1A1
Db 93 COL1A1

RESULT 49
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 94 COL1A1
Db 95 COL1A1

RESULT 50
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 96 COL1A1
Db 97 COL1A1

RESULT 51
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 98 COL1A1
Db 99 COL1A1

RESULT 52
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 100 COL1A1
Db 101 COL1A1

RESULT 53
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 102 COL1A1
Db 103 COL1A1

RESULT 54
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 104 COL1A1
Db 105 COL1A1

RESULT 55
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 106 COL1A1
Db 107 COL1A1

RESULT 56
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 108 COL1A1
Db 109 COL1A1

RESULT 57
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 110 COL1A1
Db 111 COL1A1

RESULT 58
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 112 COL1A1
Db 113 COL1A1

RESULT 59
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 114 COL1A1
Db 115 COL1A1

RESULT 60
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 116 COL1A1
Db 117 COL1A1

RESULT 61
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 118 COL1A1
Db 119 COL1A1

RESULT 62
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 120 COL1A1
Db 121 COL1A1

RESULT 63
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 122 COL1A1
Db 123 COL1A1

RESULT 64
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 124 COL1A1
Db 125 COL1A1

RESULT 65
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 126 COL1A1
Db 127 COL1A1

RESULT 66
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 128 COL1A1
Db 129 COL1A1

RESULT 67
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 130 COL1A1
Db 131 COL1A1

RESULT 68
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 132 COL1A1
Db 133 COL1A1

RESULT 69
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 134 COL1A1
Db 135 COL1A1

RESULT 70
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 136 COL1A1
Db 137 COL1A1

RESULT 71
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 138 COL1A1
Db 139 COL1A1

RESULT 72
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 140 COL1A1
Db 141 COL1A1

RESULT 73
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 142 COL1A1
Db 143 COL1A1

RESULT 74
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13, Last sequence update)

Qy 144 COL1A1
Db 145 COL1A1

RESULT 75
Q9UE86_HUMAN
ID Q9UE86_HUMAN PRELIMINARY; PRT; 10 AA.
AC Q9UE86;
DT 01-MAY-2000 (TREMBLrel. 13, Created)
DT 01-JUN-2003 (TREMBLrel. 13,

Bombina variegata (Yellow-bellied toad)	OS
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Buteleostomi;	OC
Amphibia; Batrachia; Anura; Archoobatrachia; Bombinatoridae; Bombina.	RA
NCBI_TaxID=8348;	OX
[1]	RN
PROTEIN SEQUENCE, SUBCELLULAR LOCATION, AND TISSUE SPECIFICITY.	RR
TISSUE=Skin Secretion;	RC
MEDLINE=22217713; PubMed=1230593;	RX
Chen T., Orr D. F., Bjourson A.J., McClean S., O'Rourke M., Hirst D.G.,	RA
Rao P., Shaw C.;	RA
"Novel bradykinins and their precursor cDNAs from European yellow-	RA
bellied toad (Bombina variegata) skin.";	RT
Bur. J. Biochem. 269:693-700(2002).	RL
-1- FUNCTION: Produces in vitro relaxation of rat arterial smooth	CC
muscle and constriction of intestinal smooth muscle.	CC
-1- SUBCELLULAR LOCATION: Secreted.	CC
-1- TISSUE SPECIFICITY: Expressed by the skin glands.	CC
-1- SIMILARITY: Belongs to the bradykinin family.	CC
-----	CC
This Swiss-Prot entry is copyright. It is produced through a collaboration	CC
between the Swiss Institute of Bioinformatics and the EMBL outstation -	CC
the European Bioinformatics Institute. There are no restrictions on its	CC
use as long as its content is in no way modified and this statement is not	CC
removed.	CC
-----	CC
Amphibian defense peptide; Bradykinin; Direct protein sequencing;	CC
Vasoactive; Vasodilator.	KW
SEQUENCE 9 AA; 1074 MW; 3393D77119C86777 CRC64;	SQ
Query Match: 31.1%; Score: 23; DB: 1; Length: 9;	Qy
Best Local Similarity 50.0%; Prod. No. 2.2e+06;	Db
Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	Qy
2 PPAYRP 7	Db
:	Qy
2 PPSRTP 7	Db
-----	CC
RESULT 11	CC
PROTEIN SEQUENCE, SUBCELLULAR LOCATION, TISSUE SPECIFICITY, AND MASS	CC
SPECTROMETRY.	CC
TISSUE=Venom.	CC
MEDLINE=212103862; PubMed=11306139; DOI=10.1016/S0041-0101(00)00262-2;	CC
Konno K., Hisaka M., Naoki H., Itagaki Y., Yasuhara T., Juliano M.A.,	CC
Juliano L., Palma M.S., Yamane T., Nakajima T.;	CC
"Isolation and sequence determination of peptides in the venom of the	CC
spider wasp (Cynophonyx dorsalis) guided by matrix-assisted laser	CC
desorption/ionization time of flight (MALDI-TOF) mass spectrometry.";	CC
Toxicin 39:1257-1260(2001).	CC
-1- FUNCTION: Produces in vitro relaxation of rat arterial smooth	CC
muscle and constriction of intestinal smooth muscle (By	CC
similarity).	CC
-1- SUBCELLULAR LOCATION: Secreted.	CC
-1- TISSUE SPECIFICITY: Expressed by the venom gland.	CC
-1- MASS SPECTROMETRY: MW=1074.58; METHOD=MALDI; RANGE=1-9;	CC
NOTE=Ref.1.	CC
-1- SIMILARITY: Belongs to the bradykinin family.	CC
-----	CC
This Swiss-Prot entry is copyright. It is produced through a collaboration	CC
between the Swiss Institute of Bioinformatics and the EMBL outstation -	CC
the European Bioinformatics Institute. There are no restrictions on its	CC
use as long as its content is in no way modified and this statement is not	CC
removed.	CC

the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.

CC DR GO:0005615; C:extracellular space; IDA.

CC DR GO: GO:0045776; P:negative regulation of blood pressure; ISS.

CC DR GO: GO:0045987; P:positive regulation of smooth muscle contraction; . ; ISS.

CC KW SEQUENCE; "Ornitho-kininogen and ornitho-kinin: isolation, characterization and chemical structure";

CC SQ SEQUENCE 9 AA; 1074 MW; 3393D771A9C86777 CRC64;

Query Match 31.1%; Score 23; DB 1; Length 9;

Best Local Similarity 50.0%; Pred. No. 2.2e+06;

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7

Dy 2 PPGFPP 7

RESULT 12

P84457 TRASC

ID P84457_TRASC PRELIMINARY; PRT; 9 AA.

AC P84457;

DT 10-MAY-2005 (TREMBLrel. 30, Created)

DT 10-MAY-2005 (TREMBLrel. 30, Last sequence update)

DT 10-MAY-2005 (TREMBLrel. 30, Last annotation update)

DE [Thres]bradykinin.

OS Trachemys scripta (Red-eared slider turtle) (Pseudemys scripta);

OC Buharyota; Chordata; Craniota; Vertebrata; Buteleostomi;

OC Testudines; Cryptodira; Testudinidae; Emydidae; Trachemys.

NCBI_TaxID=34903;

OX [1]

RP PROTEIN SEQUENCE.

RX PubMed=2298179;

RA Conlon J.M., Hicks J.W., Smith D.D.;

RT "Isolation and biological activity of a novel kinin

RT (Tyr(6)bradykinin) from the turtle, Pseudemys scripta.";

RL Endocrinology 16:985-991 (1990).

KW Direct protein sequencing;

SEQUENCE 9 AA; 1074 MW; 3393D771A9C867777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 9;

Best Local Similarity 50.0%; Pred. No. 2.2e+06;

Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7

Dy 2 PPGFPP 7

RESULT 13

Q71250 CHICK

ID Q71250_CHICK PRELIMINARY; PRT; 9 AA.

AC Q71250;

DT 01-MAR-2004 (TREMBLrel. 26, Created)

DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)

DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)

DE Ornitho-kinin.

OS Gallus gallus (Chicken).

OC Buharyota; Meazoa; Chordata; Craniota; Vertebrata; Buteleostomi;

OC Archosauria; Aves; Neognathae; Galliformes; Phasianidae; Phasianinae;

OC Gallus.

NCBI_TaxID=9031;

RN PROTEIN SEQUENCE

RX MEDLINE=901072; PubMed=2603803;

RA Kimura M., Sueyoshi T., Morita T., Tanaka K., Iwanaga S.;

RT "Ornitho-kininogen and ornitho-kinin: isolation, characterization and

RT chemical structure";

RL Adv. Exp. Med. Biol. 247A:359-367(1989).

DR PIR_B60246; B60246.

SQ SEQUENCE 9 AA; 1040 MW; 3393D771A9C867777 CRC64;

Db 1 : 1 2 PPGFSP 7

RESULT 16
 BRK_PHYRO STANDARD PRT: 11 AA.
 ID BRK_PHYRO STANDARD PRT: 11 AA.
 AC Q7LZ57;
 DT 05-JUL-2004 (Rel. 44; Created)
 DR 05-JUL-2004 (Rel. 44; Last sequence update)
 DT 10-MAY-2005 (Rel. 47; Last annotation update)
 DE Phyllomedusa (Bradykinin-isooleucyl-tyrosine O-sulfate).
 OS Phyllomedusa rohdei (Rhode's leaf frog).
 OC Metacarca; Metacarca; Chordata; Craniata; Vertebrata; Euteleostomi;
 Amphibia; Batrachia; Anura; Neobatrachia; Hylioidea; Hylidae;
 OC Phylomedusinae; Phylomedusidae;
 OC NCBI_TaxID:8394;

RN [1] PROTEIN SEQUENCE, AND SULFATION OF TYR-11.
 RX MEDLINE=67179312; PubMed=970859;
 RA Ambrasati A.; Bertaccini G.; Ersparmer V.;
 RT "Pharmacological data on phyllokinin (bradykinin-1-isooleucyl-tyrosine O-
 sulphate) and bradykinin-isooleucyl-tyrosine.";
 RL Br. J. Pharmacol. 27:479-485(1966).
 CC -; SUBCELLULAR LOCATION: Secreted.
 CC -; SIMILARITY: Belongs to the bradykinin family.

This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.

DR PIR; A61365; A61365.
 KW Bradykinin; Direct protein sequencing; Sulfation; Vasoactive;
 KW Vasodilator; Sulfotyrosine.
 FT MOD RESIDUE 11 11 Sulfotyrosine.
 SQ SEQUENCE 11 AA; 1337 MW; 25051393D775B9C8 CRC64;

Query Match Score 23; DB 1; Length 11;
 Best Local Similarity 50.0%; Pred. No. 8.8e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 2 PPAYRP 7

RESULT 17
 BRK_MEGFL STANDARD PRT: 11 AA.
 ID BRK_MEGFL STANDARD PRT: 11 AA.
 AC P127977;
 DT 01-OCT-1989 (Rel. 12; Created)
 DR 01-OCT-1989 (Rel. 12; Last sequence update)
 DT 10-MAY-2005 (Rel. 47; Last annotation update)
 DE Megascotia (rhin6)bradykinin-Lys-Ala) [Contains: Bradykinin-like peptide (Thr6bradykinin).
 OS Megascotia flavifrons (Garden dagger wasp) (Solitary wasp).
 OC Eukaryota; Metacarca; Arthropoda; Hexapoda; Insecta; Pterygota;
 OC Neoptera; Endopterygota; Hymenoptera; Apocrita; Aculeata; Vespoidea;
 OC Scoliidae; Megascotidae.
 RN [1] PROTEIN SEQUENCE.
 RC TISSUE=Venom;
 RX MEDLINE=87293024; PubMed=3617088; DOI=10.1016/0041-0101(87)90288-1;
 RA Yasuhara T.; Mantel P.; Nakajima T.; Piek T.;
 RT "Two kinins isolated from an extract of the venom reservoirs of the solitary wasp Megascotia flavifrons";
 RL Toxicon. 25:527-535(1987).
 [2] PROTEIN SEQUENCE.
 RC TISSUE=Venom;

RA Nakajima T.; Piek T.; Yasuhara T.; Mantel P.;
 RT "Two kinins isolated from the venom of Megascotia flavifrons.";
 RL Toxicon 25:34-34(1988).
 CC -; FUNCTION: Both proteins have bradykinin-like, although lower activities (e.g. smooth muscle contraction).
 CC -; SUBCELLULAR LOCATION: Secreted; venom reservoirs.
 CC -; SIMILARITY: Belongs to the bradykinin family.

This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.

CC DR PIR; A26744; B26744.
 DR PIR; B26744; B26744.
 DR GO; GO:0005615; C: extracellular space; IDA.
 DR GO; GO:0045776; P:negative regulation of blood pressure; IDA.
 DR GO; GO:0045987; P:positive regulation of smooth muscle contraction; IDA.
 KW Bradykinin; Direct protein sequencing; Vasoactive; Vasodilator.
 ET PEPTIDE 1 11 Megascotinakin.
 FT PEPTIDE 1 9 Bradykinin-like peptide.
 SQ SEQUENCE 11 AA; 1274 MW; 33867393D771A9C8 CRC64;

Query Match Score 23; DB 1; Length 11;
 Best Local Similarity 50.0%; Pred. No. 8.8e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 2 PPAYRP 7

RESULT 18
 Q71202_HUMAN PRELIMINARY; PRT: 11 AA.
 ID Q71202_HUMAN PRELIMINARY;
 AC 071202;
 DT 05-JUL-2004 (TREMBUREL 27; Created)
 DT 05-JUL-2004 (TREMBUREL 27; Last sequence update)

Query Match Score 23; DB 1; Length 11;
 Best Local Similarity 50.0%; Pred. No. 8.8e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 2 PPAYRP 7

RESULT 19
 Q7M4P1_HUMAN PRELIMINARY; PRT: 11 AA.
 ID Q7M4P1_HUMAN PRELIMINARY;
 AC 07M4P1;
 DT 01-MAR-2004 (TREMBUREL 26; Created)

Query Match Score 23; DB 2; Length 11;
 Best Local Similarity 66.7%; Pred. No. 8.8e+03;
 Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 6 PPAVSP 11

DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
 DE Ile-Ser-bradykinin (Fragment).
 OS Homo sapiens (Human).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominidae;
 OC Homo.
 OX NCBI_TaxID=9606;
 RN [1]
 RP PROTEIN SEQUENCE.
 RX MEDLINE=91166748; PubMed=2076202;
 RA Wunderer G., Walter I., Eschenbacher B., Lang M., Kellermann J.,
 RA Kindermann G.;
 RT "Ile-Ser-bradykinin is an aberrant permeability factor in various
 RT human malignant effusions.";
 RL Biol. Chem. Hoppe-Seyler 371:977-981(1990).
 DR PIR; S133279; S133279.
 FT NON_TER 1 1
 FT NON_TER 11 11
 SQ SEQUENCE 11 AA; 1260 MW; 33D55258B9C86777 CRC64;

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 50.0%; Pred No. 8.8e+03;
 Matches 3; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRP 7
 | : |
 Db 4 PPGFSP 9

RESULT 20
 O712U0 RAT
 ID Q712U0_RAT PRELIMINARY;
 AC PRT; 11 AA.
 DT 05-JUL-2004 (TREMBLrel. 27, Created)
 DT 05-JUL-2004 (TREMBLrel. 27, Last sequence update)
 DT 05-JUL-2004 (TREMBLrel. 27, Last annotation update)
 DE M1 muscarinic acetylcholine receptor protein (Fragment).
 OS Rattus norvegicus (Rat).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathii;
 OC Muridae; Murinae; Rattus.
 OX NCBI_TaxID=10116;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX MEDLINE=99267322; PubMed=1033492; DOI=10.1042/0264-0021-3400475;
 RA Wood I. C., Garriga Canut M., Pepitone S., Buckley N.J.;
 RT "Neuronal expression of the rat M1 muscarinic acetylcholine receptor
 gene is regulated by elements in the first exon.";
 RL Biochem J. 340:475-483(1999).
 DR EMBL; A006522; CAA07083.1; -; mRNA.
 DR GO; GO:0004872; F:receptor activity; IFA.
 KW Receptor.
 FT NON_TER 11 11
 SQ SEQUENCE 11 AA; 1099 MW; 982D0BF4C77772DS CRC64;

Query Match 31.1%; Score 23; DB 2; Length 11;
 Best Local Similarity 66.7%; Pred No. 8.8e+03;
 Matches 4; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 | : |
 Db 6 PPAVSP 11

GenCore version 5.1.7
 Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using SW model

Run on: April 19, 2006, 19:32:46 ; Search time 163 Seconds

(without alignments)
 33.324 Million cell updates/sec

Title: US-09-277-064-9

Perfect score: 74

Sequence: 1 TPPAYRPPNAPIL 13

Scoring table: BLOSUM62

Gapop 10.0 , Gapext 0.5

Searched: 1867569 seqs, 417829326 residues

Total number of hits satisfying chosen parameters:

285891

Minimum DB Seq length: 0
 Maximum DB Seq length: 13

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 75 summaries

Database : Published Applications AA_Main:*

1: /cgn2_6/prodata/1/pubpa/US07_PUBCOMB.PEP:*

2: /cgn2_6/prodata/1/pubpa/US08_PUBCOMB.PEP:*

3: /cgn2_6/prodata/1/pubpa/US09_PUBCOMB.PEP:*

4: /cgn2_6/prodata/1/pubpa/US10_PUBCOMB.PEP:*

5: /cgn2_6/prodata/1/pubpa/US10_PUBCOMB.PEP:*

6: /cgn2_6/prodata/1/pubpa/US11_PUBCOMB.PEP:*

Preb. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result- No.	Score	Query	Match	Length	DB	ID	Description
1	74	100.0	13	3	US-09-055-744-10	Sequence 10, Appl	
2	74	100.0	13	3	US-09-039-447A-86	Sequence 86, Appl	
3	74	100.0	13	3	US-09-277-074-9	Sequence 9, Appl	
4	74	100.0	13	3	US-09-277-066-9	Sequence 9, Appl	
5	74	100.0	13	3	US-09-278-110A-4	Sequence 4, Appl	
6	74	100.0	13	4	US-10-106-487-22	Sequence 22, Appl	
7	74	100.0	13	4	US-10-124-711-113	Sequence 113, Appl	
8	74	100.0	13	4	US-10-116-118-30	Sequence 30, Appl	
9	74	100.0	13	4	US-10-371-525-49	Sequence 49, Appl	
10	74	100.0	13	4	US-10-371-605-49	Sequence 49, Appl	
11	74	100.0	13	4	US-10-371-651-50	Sequence 49, Appl	
12	74	100.0	13	4	US-10-371-250-49	Sequence 49, Appl	
13	74	100.0	13	4	US-10-372-755-55	Sequence 55, Appl	
14	74	100.0	13	4	US-10-169-060A-86	Sequence 86, Appl	
15	74	100.0	13	4	US-10-188-317-22	Sequence 22, Appl	
16	74	100.0	13	4	US-10-605-511-50	Sequence 50, Appl	
17	74	100.0	13	4	US-10-182-252A-174	Sequence 137A, Appl	
18	74	100.0	13	4	US-10-133-410-63	Sequence 63, Appl	
19	74	100.0	13	4	US-10-470-045-31	Sequence 31, Appl	
20	74	100.0	13	4	US-10-470-045-31	Sequence 52, Appl	
21	74	100.0	13	4	US-10-308-681-5	Sequence 5, Appl	
22	74	100.0	13	5	US-10-691-125-6	Sequence 6, Appl	
23	74	100.0	13	5	US-10-591-008A-51	Sequence 51, Appl	
24	74	100.0	13	5	US-10-820-057A-918	Sequence 918, Appl	
25	74	100.0	13	6	US-11-055-119-80	Sequence 80, Appl	
26	69	93.2	12	4	US-10-332-862A-230	Sequence 230, Appl	
27	69	93.2	13	4	US-10-226-007-600	Sequence 600, Appl	

ALIGNMENTS

RESULT 1
 US-09-055-744-10
 Sequence 10, Application US/09055744
 / Publication No. US20010019714A1
 / GENERAL INFORMATION:
 / APPLICANT: Sia, Charles
 / APPLICANT: Chong, Pele
 / APPLICANT: Klein, Michel
 / TITLE OF INVENTION: HIV-SPECIFIC CYTOKINIX T-CELL RESPONSES
 / FILE REFERENCE: 1038-746
 / CURRENT APPLICATION NUMBER: US/09/055,744
 / CURRENT FILING DATE: 1998-04-07
 / NUMBER OF SEQ ID NOS: 10
 / SOFTWARE: PatentIn Ver. 2.0
 / SEQ ID NO: 10
 / LENGTH: 13
 / TYPE: PRT
 / ORGANISM: Human immunodeficiency virus type 1
 US-09-055-744-10

Query Match Score 74; DB 3; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0022;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 9 Application US/09227064
 ; Publication No. US2003004916A1
 ; GENERAL INFORMATION:
 ; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
 ; FILE REFERENCE: SCR2155S
 ; CURRENT APPLICATION NUMBER: US/09/277/064
 ; CURRENT FILING DATE: 1999-03-26
 ; PRIOR APPLICATION NUMBER: 08/355,558
 ; PRIOR FILING DATE: 1994-12-14
 ; PRIOR APPLICATION NUMBER: PCT/US95/16415
 ; PRIOR FILING DATE: 1995-12-14
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 9
 ; LENGTH: 13
 ; TYPE: PRT
 ; ORGANISM: Hepatitis B virus
 US-09-277-064-9

RESULT 2
 US-09-839-447A-86
 Sequence 96, Application US/09839447A
 ; Patent No. US20020058247A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sallberg, Matti
 ; TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE
 ; FILE REFERENCE: TRIPER 020CPI
 ; CURRENT APPLICATION NUMBER: US/09/839,447A
 ; CURRENT FILING DATE: 2001-08-09
 ; PRIOR APPLICATION NUMBER: 09/556605
 ; PRIOR FILING DATE: 2000-04-21
 ; NUMBER OF SEQ ID NOS: 111
 ; SOFTWARE: FastSEQ for Windows Version 4.0
 ; SEQ ID NO 86
 ; LENGTH: 13
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE:
 ; OTHER INFORMATION: Artificial Peptide
 US-09-839-447A-86

Query Match Score 74; DB 3; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0022;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 1 Application US/09277074
 ; Publication No. US20030022820A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sherman, Linda A.
 ; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
 ; FILE REFERENCE: SCR2155S
 ; CURRENT APPLICATION NUMBER: US/09/277/074
 ; CURRENT FILING DATE: 1999-03-26
 ; PRIOR APPLICATION NUMBER: 08/355,558
 ; PRIOR FILING DATE: 1994-12-14
 ; PRIOR APPLICATION NUMBER: PCT/US95/16415
 ; PRIOR FILING DATE: 1995-12-14
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 9
 ; LENGTH: 13
 ; TYPE: PRT
 ; ORGANISM: Hepatitis B virus
 US-09-277-074-9

RESULT 3
 US-09-277-074-9
 Sequence 9, Application US/09277074
 ; Publication No. US20030022820A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Sherman, Linda A.
 ; TITLE OF INVENTION: IN VIVO ACTIVATION OF TUMOR-SPECIFIC CYTOTOXIC T CELLS
 ; FILE REFERENCE: SCR2155S
 ; CURRENT APPLICATION NUMBER: US/09/277/074
 ; CURRENT FILING DATE: 1999-03-26
 ; PRIOR APPLICATION NUMBER: 08/355,558
 ; PRIOR FILING DATE: 1994-12-14
 ; PRIOR APPLICATION NUMBER: PCT/US95/16415
 ; PRIOR FILING DATE: 1995-12-14
 ; NUMBER OF SEQ ID NOS: 39
 ; SOFTWARE: PatentIn Ver. 2.1
 ; SEQ ID NO 9
 ; LENGTH: 13
 ; TYPE: PRT
 ; ORGANISM: Hepatitis B virus
 US-09-277-074-9

RESULT 4
 Query Match Score 74; DB 3; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0022;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 1 Application US/09277074
 ; Publication No. US20030022820A1
 ; GENERAL INFORMATION:
 ; APPLICANT: FIRAT, HUSYIN
 ; APPLICANT: LEMONNIER, FRANCOIS
 ; APPLICANT: MICHEL, MARIE-LOUISE PIERRE
 ; APPLICANT: LANGLADE-DEMOYEN, PIERRE
 ; TITLE OF INVENTION: DESIGN OF A POLYPEPTIDIC CONSTRUCT FOR THE INDUCTION
 ; TITLE OF INVENTION: OF
 ; TITLE OF INVENTION: HLA-A2.1 RESTRICTED HIV 1 SPECIFIC CTL RESPONSES USING
 ; TITLE OF INVENTION: HHD MICE
 ; FILE REFERENCE: G3495-0196 SEQUENCE LISTING
 ; CURRENT APPLICATION: US/10/106,487
 ; Sequence 22, Application US/10106487
 ; Publication No. US2002016472A1

CURRENT FILING DATE: 2002-03-27
 PRIORITY APPLICATION NUMBER: 09/675,673
 PRIOR FILING DATE: 2000-09-29
 PRIORITY APPLICATION NUMBER: 60/158,356
 NUMBER OF SEQ ID NOS: 41
 PRIORITY FILING DATE: 1999-10-12
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 22
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Hepatitis B virus
 US-10-106-487-22

Query Match Score 74; DB 4; Length 13;
 Best Local Similarity 100.0%; Pred. No. 0.0022;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 RESULT 8
 US-10-116-118-30
 Sequence 30, Application US/10116118
 Publication No. US20030143672A1
 GENERAL INFORMATION
 APPLICANT: Tangri, Shabnam
 ATTORNEY/AGENT INFORMATION
 Sette, Alessandro
 APPLICANT: Ishioka, Glenn
 ATTORNEY/AGENT INFORMATION
 Fikes, John D.
 TITLE OF INVENTION: Heterocyclic Analogs and Related Methods
 FILE REFERENCE: 2060.0090003
 CURRENT APPLICATION NUMBER: US/10/116,118
 CURRENT FILING DATE: 2002-08-07
 PRIOR APPLICATION NUMBER: US 60/166,529
 PRIOR FILING DATE: 1999-11-18
 PRIOR APPLICATION NUMBER: US 60/239,008
 PRIOR FILING DATE: 2000-10-06
 NUMBER OF SEQ ID NOS: 53
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO: 30
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: (HBV core)
 US-10-116-118-30

RESULT 9
 US-10-371-525-49
 Sequence 49, Application US/10371525
 Publication No. US20030203869A1
 GENERAL INFORMATION
 APPLICANT: Fikes, John D.
 ATTORNEY/AGENT INFORMATION
 Hermanson, Gary G.
 APPLICANT: Sette, Alessandro
 ATTORNEY/AGENT INFORMATION
 Ishioka, Glenn Y.
 APPLICANT: Livingston, Brian
 ATTORNEY/AGENT INFORMATION
 Cheanut, Robert W.
 APPLICANT: Epimmune Inc.
 TITLE OF INVENTION: Expression Vectors for Stabilizing an
 Immune Response and Methods of Using the Same
 FILE REFERENCE: 19963-20022,01
 CURRENT APPLICATION NUMBER: US/10/371,525
 CURRENT FILING DATE: 2003-02-21
 PRIOR APPLICATION NUMBER: US 60/085,751
 PRIOR FILING DATE: 1999-05-13
 PRIOR APPLICATION NUMBER: US 60/085,751
 PRIOR FILING DATE: 1998-05-15
 NUMBER OF SEQ ID NOS: 463

NUMBER OF SEQUENCES: 153
 CORRESPONDENCE ADDRESS:
 ADDRESS: Townsend and Townsend and Crew
 STREET: Stewart Street Tower, One Market Plaza
 CITY: San Francisco
 STATE: California
 COUNTRY: US
 ZIP: 94105-1493
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/10/128,711
 FILING DATE: 22-Apr-2002
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/08/197,484
 FILING DATE: 1-Feb-1994
 APPLICATION NUMBER: US 07/335,811
 FILING DATE: 26-Aug-1992
 APPLICATION NUMBER: US 07/874,491
 FILING DATE: 27-Apr-1992
 APPLICATION NUMBER: US 07/827,682
 FILING DATE: 9-Jan-1992
 APPLICATION NUMBER: US 07/749,568
 FILING DATE: 26-Aug-1991
 ATTORNEY/AGENT INFORMATION:
 NAME: Parmelee, Steven W.
 REGISTRATION NUMBER: 31,990
 REFERENCE/DOCKET NUMBER: 141137-26-4
 TELEPHONE: (206) 467-9600
 TELEFAX: (206) 623-6793
 INFORMATION FOR SEQ ID NO: 113:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid

```

; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 49
; LENGTH: 13
; TYPE: PRT
; FEATURE: Artificial Sequence
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
; US-10-371-525-49

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Software: FastSEQ for Windows Version 3.0
SEQ ID NO: 49
Length: 13
Type: PRT
Organism: Artificial Sequence
Feature: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-525-49

RESULT 10
US-10-371-069-49
; Sequence 49, Application US/10371069
; Publication No. US20030216342A1
; GENERAL INFORMATION:
; APPLICANT: EPIMMUNE, Inc.
; APPLICANT: Fikes, John D.
; APPLICANT: Hermanson, Gary G.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.10
; CURRENT APPLICATION NUMBER: US/10/371,069
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 49
; LENGTH: 13
; TYPE: PRT
; FEATURE: Artificial Sequence
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
; US-10-371-069-49

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Software: FastSEQ for Windows Version 3.0
SEQ ID NO: 49
Length: 13
Type: PRT
Organism: Artificial Sequence
Feature: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-069-49

RESULT 11-645-49
US-10-371-645-55
; Sequence 49, Application US/10371645
; Publication No. US20030216343A1
; GENERAL INFORMATION:
; APPLICANT: EPIMMUNE, Inc.
; APPLICANT: Fikes, John D.
; APPLICANT: Sette, Alessandro
; APPLICANT: Ishioka, Glenn Y.
; APPLICANT: Livingston, Brian
; APPLICANT: Chesnut, Robert W.
; APPLICANT: Epimmune Inc.
; TITLE OF INVENTION: Expression Vectors for Stimulating an Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.13
; CURRENT APPLICATION NUMBER: US/10/371,260
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; PRIOR APPLICATION NUMBER: US 60/085,751
; PRIOR FILING DATE: 1998-05-15
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 49
; LENGTH: 13
; TYPE: PRT
; FEATURE: Artificial Sequence
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
; US-10-371-645-49

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Software: FastSEQ for Windows Version 3.0
SEQ ID NO: 49
Length: 13
Type: PRT
Organism: Artificial Sequence
Feature: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-371-645-49

RESULT 13
US-10-37-735-55
; Sequence 55, Application US/10372735
; Publication No. US20030223251A1
; GENERAL INFORMATION:
; APPLICANT: Expression Vectors for Stimulating an Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.13
; CURRENT APPLICATION NUMBER: US/10/372735
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 49
; LENGTH: 13
; TYPE: PRT
; FEATURE: Artificial Sequence
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
; US-10-37-735-55

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022; Mismatches 0; Indels 0; Gaps 0;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Software: FastSEQ for Windows Version 3.0
SEQ ID NO: 49
Length: 13
Type: PRT
Organism: Artificial Sequence
Feature: residues 128-141 of HBV core antigen (HBVcore 128)
US-10-37-735-55
; Sequence 55, Application US/10372735
; Publication No. US20030223251A1
; GENERAL INFORMATION:
; APPLICANT: Expression Vectors for Stimulating an Immune Response and Methods of Using the Same
; FILE REFERENCE: 39963-20022.13
; CURRENT APPLICATION NUMBER: US/10/372735
; CURRENT FILING DATE: 2003-02-21
; PRIOR APPLICATION NUMBER: US 09/078,904
; PRIOR FILING DATE: 1998-05-13
; NUMBER OF SEQ ID NOS: 463
; SOFTWARE: FastSEQ for Windows Version 3.0
; SEQ ID NO: 49
; LENGTH: 13
; TYPE: PRT
; FEATURE: Artificial Sequence
; OTHER INFORMATION: residues 128-141 of HBV core antigen (HBVcore 128)
; US-10-37-735-55

```

APPLICANT: Salberg, Matti
TITLE OF INVENTION: SPECIFICITY EXCHANGERS THAT REDIRECT
TITLE OF INVENTION: ANTIBODIES TO A PATHOGEN
FILE REFERENCE: TRIPPEP-7AUC4CP1
CURRENT APPLICATION NUMBER: US/10/372,735
CURRENT FILING DATE: 2003-02-21
PRIOR APPLICATION NUMBER: 10/234,579
PRIOR FILING DATE: 2002-08-30
PRIOR APPLICATION NUMBER: 09/839,666
PRIOR FILING DATE: 2001-04-19
PRIOR APPLICATION NUMBER: 09/532,106
PRIOR FILING DATE: 2000-03-21
PRIOR APPLICATION NUMBER: 09/246,258
PRIOR FILING DATE: 1999-02-08
PRIOR APPLICATION NUMBER: 08/737,085
PRIOR FILING DATE: 1996-12-27
PRIOR APPLICATION NUMBER: PCT/SE95/00468
PRIOR FILING DATE: 1995-04-27
PRIOR APPLICATION NUMBER: 09/664,945
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: 09/664,025
PRIOR FILING DATE: 2000-09-19
PRIOR APPLICATION NUMBER: PCT/IB01/02227
PRIOR FILING DATE: 2001-09-19
PRIOR APPLICATION NUMBER: 10/153,271
PRIOR FILING DATE: 2002-05-21
Remaining Prior Application data removed - See File Wrapper or PALM.
NUMBER OF SEQ ID NOS: 199
SOFTWARE: FastSE0 for Windows Version 4.0
CROSS REFERENCE TO RELATED APPLICATIONS
CROSS REFERENCE TO RELATED APPLICATIONS

```

; SEQ_ID NO: 13
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER_INFORMATION: Artificially Synthesized Peptides
; JS-10-372-135-55

Query Match          100.0%;  Score 74;  DB 4;  Length 13;
Best Local Similarity 100.0%;  Pred. No. 0.0022;
Matches 13;  Conservative 0;  Mismatches 0;  Indels 0;

```

1 TPPAYRPNAPL 13

RESULTS 14
S-10-369-060A-86
Sequence 86, Application US/10369060A
Publication No. US2003023581A1
GENERAL INFORMATION:
APPLICANT: Saarinen, Matti
TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE
HEPATITIS B VIRUS CORE AND E ANTIGENS
FILE REFERENCE: TRIPPE 020CP1C1
CURRENT APPLICATION NUMBER: US/10/369,060A
CURRENT FILING DATE: 2003-02-14
PRIOR APPLICATION NUMBER: 09-839,447
PRIOR FILING DATE: 2001-04-20
PRIOR APPLICATION NUMBER: 09-556,605
PRIOR FILING DATE: 2000-04-21
NUMBER OF SEQ ID NOS: 111
SOFTWARE: FastSEQ for Windows Version 4.0
SEQ ID NO 86
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION - Misspellings

Query Match 100.0% ; Score 74 ; DB 4 ; Length 13 ;

```

RESULT 15
US-10-388-337-22
; Sequence 22, Application US/10388337
; Publication No. US20040018200A1
; GENERAL INFORMATION:
; APPLICANT: FIRAT, Huseyin
; APPLICANT: LEMONNIER, Francois
; APPLICANT: LANGLADE-DEMOYEN, Pierre
; APPLICANT: MICHEL, Marie-Louise
; APPLICANT: SUHRIER, Andreas A
; TITLE OF INVENTION: HYBRID OR CHIMERIC POLYNUCLEOTIDES, PROTEINS, AND
; COMPOSITIONS COMPRISING HEPATITIS B VIRUS SEQUENCES
; FILE REFERENCE: 03495-0198 SEQUENCE LISTING
; CURRENT APPLICATION NUMBER: US/10/388,337
; CURRENT FILING DATE: 2003-03-14
; PRIOR APPLICATION NUMBER: US/09/671,198B
; PRIOR FILING DATE: 2000-09-28
; PRIOR APPLICATION NUMBER: 60/156,945
; PRIOR FILING DATE: 1999-09-30
; NUMBER OF SEQ ID NOS: 25
; SEQ ID NO: 22
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Hepatitis B virus
US-10-388-337-22

Query Match          100.0%;  Score 74;  DB 4;  Length 13;
Best Local Similarity 100.0%;  Pred. No. 0.0022;
Matches 13;  Conservative 0;  Mismatches 0;  Indels 0;  Gaps 0;

Qy      1 TPPAYRPNAPIL 13
Db      1 TPPAYRPNAPIL 13
Db      1 TPPAYRPNAPIL 13

RESULT 16
US-10-608-541-50
; Sequence 50, Application US/10608541
; Publication No. US2004001989A1
; GENERAL INFORMATION:
; APPLICANT: Matti Salberg
; TITLE OF INVENTION: LIGAND/RECEPTOR SPECIFICITY EXCHANGERS
; TITLE OF INVENTION: THAT REDIRECT ANTIBODIES TO RECEPTORS ON A PATHOGEN
; FILE REFERENCE: TRIPPP-007CP3C1
; CURRENT APPLICATION NUMBER: US/10/608,541
; CURRENT FILING DATE: 2003-06-27
; PRIOR APPLICATION NUMBER: 09/664,945
; PRIOR FILING DATE: 2000-09-19
; PRIOR APPLICATION NUMBER: 09/532,106
; PRIOR FILING DATE: 2000-03-21
; PRIOR APPLICATION NUMBER: 09/246,258
; PRIOR FILING DATE: 1999-04-08
; PRIOR APPLICATION NUMBER: 08/737,085
; PRIOR FILING DATE: 1996-12-27
; PRIOR APPLICATION NUMBER: PCT/SE 95/00468
; PRIOR FILING DATE: 1995-04-27
; PRIOR APPLICATION NUMBER: SE 9401460
; PRIOR FILING DATE: 1994-04-28
; NUMBER OF SEQ ID NOS: 105
; SEQ ID NO: 50
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Artificial Sequence
; SOFTWARE: FastSeq for Windows Version 4.0

```

OTHER INFORMATION: Antigenic domain peptide
US-10-608-541-50

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 17
; Sequence 1374, Application US/101822252A
; Publication No. US20040072162A1
; GENERAL INFORMATION:
; APPLICANT: FOMSGAARD, ANDERS
; APPLICANT: BRUNAK, SOREN
; APPLICANT: BUUS, SOREN
; APPLICANT: CORBET, SYLVIE
; APPLICANT: LAUENOLLER, SAINNE LISE
; APPLICANT: HANSEN, JAN
; TITLE OF INVENTION: HIV PEPTIDE AND NUCLEIC ACIDS ENCODING THEM FOR DIAGNOSIS AND
; TITLE OF INVENTION: CONTROL OF HIV INFECTIONS
; FILE REFERENCE: 030307/0205
; CURRENT APPLICATION NUMBER: US/10/182.252A
; CURRENT FILING DATE: 2003-04-10
; PRIOR APPLICATION NUMBER: PCT/DK01/000059
; PRIOR FILING DATE: 2001-01-29
; PRIOR APPLICATION NUMBER: EP 00610017.6
; PRIOR FILING DATE: 2000-01-28
; PRIOR APPLICATION NUMBER: US 60/179,333
; PRIOR FILING DATE: 2000-01-31
; NUMBER OF SEQ ID NOS: 1388
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 1374
; LENGTH: 13
; TYPE: PRT
; ORGANISM: Human immunodeficiency virus
US-10-182-252A-1374

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
Db 1 TPPAYRPPNAPIL 13

RESULT 18
; Sequence 63, Application US/10333430
; Publication No. US20040072240A1
; GENERAL INFORMATION:
; APPLICANT: INSERM
; APPLICANT: INSTITUT GUSTAVE ROUSSY
; APPLICANT: KOSMATOPoulos, Kostas
; APPLICANT: TOURDOT, Sophie
; APPLICANT: SCARDINO, Antonio
; APPLICANT: GROSS, David, Alexandre
; TITLE OF INVENTION: METHOD FOR SCREENING PEPTIDES FOR USE IN
; TITLE OF INVENTION: IMMUNOTHERAPY
; FILE REFERENCE: 3339/259034
; CURRENT APPLICATION NUMBER: US/10/333,430
; CURRENT FILING DATE: 2003-10-02
; PRIOR APPLICATION NUMBER: FR 0009591
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: PatentIn Ver. 2.1
; SEQ ID NO: 63
; LENGTH: 13

Query Match 100.0%; Score 74; DB 4; Length 13;
Best Local Similarity 100.0%; Pred. No. 0.0022;
Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13

1 TPPAYPPNAPPL 13
Db

Search completed: April 19, 2006, 19:36:14
Job time : 164 sec

SEQ ID NO 91
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-491-096-91

Query Match 100.0%; Score 74; DB 6; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.8e-05;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

RESULT 4
 US-11-188-187A-86
 Sequence 86, Application US/11188187A
 Publication No. US20060020110A1
 GENERAL INFORMATION:
 APPLICANT: Sallberg, Marti
 TITLE OF INVENTION: SYNTHETIC PEPTIDES THAT BIND TO THE HEPATITIS B VIRUS CORE AND B ANTIGENS
 FILE REFERENCE: TRIPPEP 20CPICIC
 CURRENT APPLICATION NUMBER: US/11/188,187A
 PRIORITY APPLICATION NUMBER: 10/369,060
 PRIOR FILING DATE: 2003-02-14
 PRIORITY APPLICATION NUMBER: 09/839,447
 PRIORITY FILING DATE: 2001-04-20
 PRIORITY APPLICATION NUMBER: 09/556,605
 PRIORITY FILING DATE: 2000-04-21
 NUMBER OF SEQ ID NOS: 111
 SOFTWARE: FastSEQ For Windows Version 4.0
 SEQ ID NO 86
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Synthetically prepared amino acid sequence
 US-11-188-187A-86

Query Match 100.0%; Score 74; DB 7; Length 13;
 Best Local Similarity 100.0%; Pred. No. 2.8e-05;
 Matches 13; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 TPPAYRPPNAPIL 13
 Db 1 TPPAYRPPNAPIL 13

RESULT 5
 US-10-467-033-103
 Sequence 103, Application US/10467033
 Publication No. US20060019248A1
 GENERAL INFORMATION:
 APPLICANT: Tizzani, Valdeniz
 TITLE OF INVENTION: Mutant SH3-Binding Protein Compositions and Methods
 FILE REFERENCE: H0498.702044US00
 CURRENT APPLICATION NUMBER: US/10/467,033
 PRIORITY APPLICATION NUMBER: 2003-08-01
 PRIOR FILING DATE: 2001-02-02
 NUMBER OF SEQ ID NOS: 113
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO 103
 LENGTH: 10
 TYPE: PRT
 ORGANISM: homo sapiens
 US-10-467-033-103

Query Match 56.8%; Score 42; DB 6; Length 10;

SEQ ID NO 10
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence

Best Local Similarity 70.0%; Pred. No. 1.1;
Matches 7; Conservative 0; Mismatches 3;
Indels 0; Gaps 0;

Query Match Score 29; DB 7; Length 12;
Best Local Similarity 55.6%; Pred. No. 1.1e+02;
Matches 5; Conservative 1; Mismatches 3;
Indels 0; Gaps 0;

Qy 3 PAYRPPNAP 11
Db 2 PPHSPENAP 10

RESULT 6
US-11-352-904-4
Sequence 4, Application US/11252904
Publication No. US20060039911A1
GENERAL INFORMATION:
APPLICANT: Gevaras, Philip
APPLICANT: Stephen, Grimes
APPLICANT: Karr, Stephen
APPLICANT: Michaeli, Dov
TITLE OF INVENTION: Method for the Treatment of Gastroesophageal Reflux Disease
CURRENT APPLICATION NUMBER: US/11/252,904
CURRENT FILING DATE: 2005-10-18
PRIOR APPLICATION NUMBER: US/10/314,057
PRIOR FILING DATE: 2002-12-06
PRIOR APPLICATION NUMBER: US/09/700,378
PRIOR FILING DATE: 2000-11-14
PRIOR APPLICATION NUMBER: PCT/US99/10734
PRIOR FILING DATE: 1999-05-14
PRIOR APPLICATION NUMBER: 60/085,610
PRIOR FILING DATE: 1998-05-15
NUMBER OF SEQ ID NOS: 8
SOFTWARE: PatentIn version 3.0
SEQ ID NO: 4
LENGTH: 12
TYPE: PRT
ORGANISM: rat
FEATURE:
NAME/KEY: MOD_RES
LOCATION: (1)_(1)
OTHER INFORMATION: pyroglutamic acid

US-11-252-904-4

Query Match Score 40.5%; DB 7; Length 12;
Best Local Similarity 71.4%; Pred. No. 76;
Matches 5; Conservative 0; Mismatches 2;
Indels 0; Gaps 0;

Qy 2 PPAYRPP 8
Db 3 PPLERPP 9

RESULT 7
US-11-069-858-1
Sequence 1, Application US/11069858
Publication No. US20050249682A1
GENERAL INFORMATION:
APPLICANT: Buseman-Williams, Janine
APPLICANT: Huang, Xuuying
APPLICANT: Wang, Hong
APPLICANT: Whiting, Gary
TITLE OF INVENTION: Long Lasting Waterproof Sunscreen Comprising Metal Oxide
FILE REFERENCE: CH2985 US C1P
CURRENT APPLICATION NUMBER: US/11/069,858
CURRENT FILING DATE: 2005-02-28
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.3
SEQ ID NO: 1
LENGTH: 12
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Skin-binding peptide

US-11-069-858-1
Sequence 1, Application US/11069858
Publication No. US20050249682A1
GENERAL INFORMATION:
APPLICANT: Buseman-Williams, Janine
APPLICANT: Huang, Xuuying
APPLICANT: Wang, Hong
APPLICANT: Whiting, Gary
TITLE OF INVENTION: Long Lasting Waterproof Sunscreen Comprising Metal Oxide
FILE REFERENCE: CH2985 US C1P
CURRENT APPLICATION NUMBER: US/11/069,858
CURRENT FILING DATE: 2005-02-28
NUMBER OF SEQ ID NOS: 9
SOFTWARE: PatentIn version 3.3
SEQ ID NO: 1
LENGTH: 12
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Skin-binding peptide

RESULT 8
US-10-966-648-9
Sequence 9, Application US/10966648
Publication No. US0050249734A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, J. Gregor
APPLICANT: de Lecea, Luis
APPLICANT: Henriksen, Steven J.
APPLICANT: Signins, George R.
APPLICANT: The Scripps Research Institute
TITLE OF INVENTION: Antibodies to Cortistatin, Compositions and Methods
FILE REFERENCE: 14740A-000640US
CURRENT APPLICATION NUMBER: US/10/966,648
CURRENT FILING DATE: 2004-10-14
PRIOR APPLICATION NUMBER: US 08/648,322
PRIOR FILING DATE: 1996-05-15
PRIOR APPLICATION NUMBER: US 08/857,389
PRIOR FILING DATE: 1997-05-15
PRIOR APPLICATION NUMBER: US 09/766,396
PRIOR FILING DATE: 2001-01-18
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 9
LENGTH: 13
TYPE: PRT
ORGANISM: Artificial Sequence
FEATURE:
OTHER INFORMATION: Cleavage product

US-10-966-648-9

Query Match Score 37.8%; DB 6; Length 13;
Best Local Similarity 50.0%; Pred. No. 1.6e-02;
Matches 4; Conservative 2; Mismatches 2;
Indels 0; Gaps 0;

Qy 2 PPAYRPPN 9
Db 4 PPLQQEPH 11

RESULT 9
US-10-966-648-12
Sequence 12, Application US/10966648
Publication No. US20050249734A1
GENERAL INFORMATION:
APPLICANT: Sutcliffe, J. Gregor
APPLICANT: de Lecea, Luis
APPLICANT: Henriksen, Steven J.
APPLICANT: Signins, George R.
APPLICANT: The Scripps Research Institute
TITLE OF INVENTION: Antibodies to Cortistatin, Compositions and Methods
FILE REFERENCE: 14740A-000640US
CURRENT APPLICATION NUMBER: US/10/966,648
CURRENT FILING DATE: 2004-10-14
PRIOR APPLICATION NUMBER: US 08/648,322
PRIOR FILING DATE: 1996-05-15
PRIOR APPLICATION NUMBER: US 08/857,389
PRIOR FILING DATE: 1997-05-15
PRIOR APPLICATION NUMBER: US 09/766,396
PRIOR FILING DATE: 2001-01-18
NUMBER OF SEQ ID NOS: 31
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO: 12

LENGTH: 13
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE: Description of Artificial Sequence: mouse
 OTHER INFORMATION: Coristatin cleavage product
 US-10-966-148-12

Query Match 37.8%; Score 28; DB 6; Length 13;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPN 9
 Db 4 PPPQQPH 11

RESULT 10
 US-10-989-226-53
 Sequence 53, Application US/10989226
 Publication No. US20050255491A1
 GENERAL INFORMATION:
 APPLICANT: Lee, Frank D.
 ATTORNEY: Meng, Xun
 APPLICANT: Areyan, Noubar B.
 ATTORNEY: Gordon, Neal F.
 TITLE OF INVENTION: SMALL MOLECULE AND PEPTIDE ARRAYS AND
 TITLE OF INVENTION: USES THEREOF
 FILE REFERENCE: EPBM-P01-005
 CURRENT APPLICATION NUMBER: US/10/989,226
 CURRENT FILING DATE: 2004-11-15
 PRIOR APPLICATION NUMBER: US 60/519,530
 PRIOR FILING DATE: 2003-11-13
 PRIOR APPLICATION NUMBER: US 60/532,687
 PRIOR FILING DATE: 2003-12-24
 NUMBER OF SEQ ID NOS: 84
 SOFTWARE: FastSEQ for Windows Version 4.0
 SEQ ID NO: 53
 LENGTH: 13
 TYPE: PRT
 ORGANISM: Homo sapiens
 US-10-989-226-53

Query Match 37.8%; Score 28; DB 6; Length 13;
 Best Local Similarity 66.7%; Pred. No. 1.6e+02;
 Matches 4; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 2 PPAYRP 7
 Db 7 PPAWQP 12

COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/11/126,772
 FILING DATE: 10-May-2005
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/10/062,375
 FILING DATE: 30-Jan-2002
 APPLICATION NUMBER: US/08/857,389
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: Schmonsees, William
 REGISTRATION NUMBER: 31,796
 REFERENCE/DOCKET NUMBER: 22908-0002
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 324-7041
 TELEFAX: (415) 324-0638
 INFORMATION FOR SEQ ID NO: 9:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 TOPOLOGY: Linear
 MOLECULE TYPE: protein
 FRAGMENT TYPE: internal
 FRAGMENT DESCRIPTION: SEQ ID NO: 9:
 US-11-126-772-9

Query Match 37.8%; Score 28; DB 7; Length 13;
 Best Local Similarity 50.0%; Pred. No. 1.6e+02;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 2 PPAYRPN 9
 Db 4 PPPQQPH 11

RESULT 12
 US-11-126-772-12
 Sequence 12, Application US/11126772
 Publication No. US2006004107A1
 GENERAL INFORMATION:
 APPLICANT: Surcliffe, Gregor J.
 de Lecia, Luis
 Siggins, George R.
 Henriksen, Steven J.
 TITLE OF INVENTION: CORTISTATIN: NEUROPEPTIDES,
 NUMBER OF SEQUENCES: 26
 CORRESPONDENCE ADDRESS:
 ADDRESSEE: THE SCRIPPS RESEARCH INSTITUTE
 STREET: 10666 North Torrey Pines Road, TPC-8
 CITY: La Jolla
 STATE: California
 ZIP: 92037
 COMPUTER READABLE FORM:
 MEDIUM TYPE: Floppy disk
 COMPUTER: IBM PC compatible
 OPERATING SYSTEM: PC-DOS/MS-DOS
 SOFTWARE: PatentIn Release #1.0, Version #1.25
 CURRENT APPLICATION DATA:
 APPLICATION NUMBER: US/11/126,772
 FILING DATE: 10-May-2005
 CLASSIFICATION: <Unknown>
 PRIOR APPLICATION DATA:
 APPLICATION NUMBER: US/10/062,375
 FILING DATE: 30-Jan-2002
 APPLICATION NUMBER: US/08/857,389
 FILING DATE: <Unknown>
 ATTORNEY/AGENT INFORMATION:
 NAME: Schmonsees, William

REGISTRATION NUMBER: 31.796
 REFERENCE/DOCKET NUMBER: 22908-0002
 TELECOMMUNICATION INFORMATION:
 TELEPHONE: (415) 324-6741
 TELEFAX: (415) 324-0638
 INFORMATION FOR SEQ ID NO: 12:
 SEQUENCE CHARACTERISTICS:
 LENGTH: 13 amino acids
 TYPE: amino acid
 TOPOLOGY: linear
 MOLECULE TYPE: protein
 FRAGMENT TYPE: internal
 SEQUENCE DESCRIPTION: SEQ ID NO: 12:
 US-11-126-772-12

Query Match Score 37.8%;
 Best Local Similarity 50.0%;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRPN 9
 Db 4 PPLQQQPH 11

RESULT 13
 US-11-007-772A-45
 Sequence 45, Application US/11007772A
 Publication No. US2006063699A1
 GENERAL INFORMATION:
 APPLICANT: Larsen, Bjarne Due
 TITLE OF INVENTION: Pharmacologically Active Peptide Conjugates Having a Reduced
 FILE REFERENCE: 50412/008004
 CURRENT APPLICATION NUMBER: US/11/007,772A
 CURRENT FILING DATE: 2004-12-07
 PRIOR APPLICATION NUMBER: 09/341,590
 PRIOR FILING DATE: 1999-07-12
 PRIOR APPLICATION NUMBER: PCT/DR9/00118
 PRIOR FILING DATE: 1999-03-09
 PRIOR APPLICATION NUMBER: DK 0317/98
 PRIOR FILING DATE: 1998-03-09
 NUMBER OF SEQ ID NOS: 134
 SOFTWARE: PatentIn version 3.3
 SEQ ID NO 45
 LENGTH: 13
 TYPE: PRT
 FEATURE: NAME/KEY: MISC. FEATURE
 FEATURE: OTHER INFORMATION: Synthetic
 FEATURE: OTHER INFORMATION: Artificial Sequence
 FEATURE: OTHER INFORMATION: Synthetic
 LOCATION: (1)-(1)

US-11-007-772A-45
 Sequence 28, Score 37.8%;
 Best Local Similarity 50.0%;
 Matches 4; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
 Qy 2 PPAYRPN 9
 Db 4 PPLQQQPH 11

RESULT 14
 US-11-187-419-9

Sequence 9, Application US/11187419
 Publication No. US20060018919A1
 GENERAL INFORMATION:
 APPLICANT: Gu, Xin-Xing
 TITLE OF INVENTION: PEPTIDE MINOTOPES OF LIPOOLIGOSACCHARIDE
 TITLE OF INVENTION: FROM NONTYPEABLE HAEMOPHILUS INFLUENZAE AS VACCINES
 FILE REFERENCE: NIH267.001C1

/* CURRENT APPLICATION NUMBER: US/11/187,419
 /* CURRENT FILING DATE: 2005-07-22
 /* PRIOR APPLICATION NUMBER: PCT/US2004/001457
 /* PRIOR FILING DATE: 2004-01-21
 /* PRIOR APPLICATION NUMBER: US 60/441,928
 /* PRIOR FILING DATE: 2003-01-22
 /* NUMBER OF SEQ ID NOS: 11
 /* SOFTWARE: FastSeq for Windows Version 4.0
 /* SEQ ID NO 9
 /* LENGTH: 12
 /* TYPE: PRT
 /* ORGANISM: Artificial Sequence
 /* FEATURE:
 /* OTHER INFORMATION: synthetic peptide
 /* US-11-187-419-9

Query Match Score 37.5%;
 Best Local Similarity 58.3%;
 Matches 7; Conservative 0; Mismatches 2; Indels 3; Gaps 1;
 Qy 4 AYRP--NAPI 12
 Db 1 AYSPTPAAEAPI 12

RESULT 15
 US-11-004-399-2791

Sequence 2791, Application US/11004399
 Publication No. US2006005316A1
 GENERAL INFORMATION:
 APPLICANT: Chye, Mee Lee
 APPLICANT: Li, Hong Ye
 APPLICANT: Ramalingam, Sathishkumar
 APPLICANT: Poon, Leo Lit Man
 APPLICANT: Peiris, Joseph Sriyal Malik
 TITLE OF INVENTION: Generically Modified Plants Comprising SARS-CoV Viral Nucleotide
 TITLE OF INVENTION: Sequences and Methods of Use Thereof For Immunization Against
 FILE REFERENCE: 2587/73165/ RDK
 CURRENT APPLICATION NUMBER: US/11/004,399
 CURRENT FILING DATE: 2004-12-03
 PRIOR APPLICATION NUMBER: US 60/527,637
 PRIOR FILING DATE: 2003-12-03
 NUMBER OF SEQ ID NOS: 4043
 SOFTWARE: PatentIn version 3.1
 SEQ ID NO 2791
 LENGTH: 6
 TYPE: PRT
 ORGANISM: SARS-CoV Virus
 /* US-11-004-399-2791

Query Match Score 36.5%;
 Best Local Similarity 66.7%;
 Matches 4; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 Qy 6 RPPNPA 11
 Db 1 RPPCP 6

RESULT 16
 US-10-510-155-69

Sequence 63, Application US/10510155
 Publication No. US20060053228A1
 GENERAL INFORMATION:
 APPLICANT: Kimberly A. Kelly
 APPLICANT: David A. Jones
 TITLE OF INVENTION: COLON TUMOR SPECIFIC BINDING PEPTIDES
 FILE REFERENCE: 38509-0015US1
 CURRENT APPLICATION NUMBER: US/10/510,155
 CURRENT FILING DATE: 2004-10-05
 PRIOR APPLICATION NUMBER: PCT/US03/10630
 PRIOR FILING DATE: 2003-04-07
 PRIOR APPLICATION NUMBER: US 60/369,850

PRIOR FILING DATE: 2002-04-05
 NUMBER OF SEQ ID NOS: 145
 SOFTWARE: PatentIn version 3.2
 SEQ ID NO: 69
 LENGTH: 7
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
 US-10-510-155-69

Query Match 36 5%; Score 27; DB 6; Length 7;
 Best Local Similarity 66.7%; Pred. No. 1.8e+05;
 Matches 4; Conservative 1; Mismatches 1; Indels 0;
 Gaps 0;
 Qy 2 PPAYRP 7
 | | : |
 Db 1 PPAHHP 6

RESULT 17
 US-11-196-459-5
 Sequence 5, Application US/11196459
 Publication No. US20030266014A1
 GENERAL INFORMATION:
 APPLICANT: OKA, YOSHITIRO
 TITLE OF INVENTION: TUMOR ANTIGEN BASED ON PRODUCTS OF THE TUMOR SUPPRESSOR GENE WT1
 FILE REFERENCE: 053446/0298
 CURRENT APPLICATION NUMBER: US/11/196,459
 CURRENT FILING DATE: 2005-08-04
 PRIOR APPLICATION NUMBER: US/09/744,815
 PRIOR FILING DATE: 2001-01-30
 PRIOR APPLICATION NUMBER: PCT/JP99/04130
 PRIOR FILING DATE: 1999-07-30
 PRIOR APPLICATION NUMBER: JP 10-218093
 PRIOR FILING DATE: 1998-07-31
 NUMBER OF SEQ ID NOS: 8
 SEQ ID NO: 5
 LENGTH: 9
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Description of Artificial Sequence: Synthetic peptide
 US-11-196-459-5

Query Match 36 5%; Score 27; DB 7; Length 9;
 Best Local Similarity 83.3%; Pred. No. 1.8e+05;
 Matches 5; Conservative 0; Mismatches 1; Indels 0;
 Gaps 0;
 Qy 8 PNAPIL 13
 | | | |
 Db 4 PNAPYL 9

RESULT 18
 US-11-146-854-49
 Sequence 49, Application US/11146854
 Publication No. US20050277161A1
 GENERAL INFORMATION:
 APPLICANT: Engelhardt, Victor H
 APPLICANT: Zarling, Angela
 APPLICANT: Hunt, Donald F
 APPLICANT: Evans, Anne M
 APPLICANT: Shababowitz, Jeffrey
 TITLE OF INVENTION: PHOSPHOPEPTIDE ANTIGENS ASSOCIATED WITH MHC MOLECULES
 FILE REFERENCE: 01015-02
 CURRENT APPLICATION NUMBER: US/11/146,854
 CURRENT FILING DATE: 2005-06-07
 PRIOR APPLICATION NUMBER: US 60/578,205

PRIOR FILING DATE: 2004-06-09
 NUMBER OF SEQ ID NOS: 69
 SOFTWARE: PatentIn version 3.3
 SEQ ID NO: 49
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Homo sapiens
 FEATURE:
 NAME/KEY: MOD_RES
 LOCATION: (4)..(4)
 OTHER INFORMATION: PHOSPHORYLATION
 US-11-146-854-49

Query Match 36.5%; Score 27; DB 7; Length 10;
 Best Local Similarity 55.6%; Pred. No. 1.7e+02;
 Matches 5; Conservative 0; Mismatches 4; Indels 0;
 Gaps 0;
 Qy 3 PAYRPNAP 11
 | | | |
 Db 2 PRSPPRPR 10

RESULT 19
 US-10-989-767A-7
 Sequence 7, Application US/10989767A
 Publication No. US20060018917A1
 GENERAL INFORMATION:
 APPLICANT: PARIS, MARY
 APPLICANT: ROBERT, RENE
 APPLICANT: RAITANO, ARTHUR
 APPLICANT: APAR, DANIEL
 APPLICANT: LEVIN, ELANA
 APPLICANT: CHALLITA-EID, PIA
 APPLICANT: JAKOBOWITZ, AYA
 TITLE OF INVENTION: NUCLEAR ACID AND CORRESPONDING PROTEIN NAMED 158P1D7
 TITLE OF INVENTION: USEFUL IN THE TREATMENT AND DETECTION OF BLADDER AND OTHER CANCERS
 TITLE OF INVENTION: OTHER CANCERS
 FILE REFERENCE: 511582005004
 CURRENT APPLICATION NUMBER: US/10/989,767A
 CURRENT FILING DATE: 2004-11-15
 PRIOR APPLICATION NUMBER: 10/277,292
 PRIOR FILING DATE: 2002-10-21
 PRIOR APPLICATION NUMBER: 09/935,430
 PRIOR FILING DATE: 2001-08-22
 PRIOR APPLICATION NUMBER: 60/227,098
 PRIOR FILING DATE: 2000-08-22
 PRIOR APPLICATION NUMBER: 60/282,739
 NUMBER OF SEQ ID NOS: 700
 SOFTWARE: PatentIn Ver. 2.1
 SEQ ID NO: 7
 LENGTH: 9
 TYPE: PRT
 ORGANISM: Artificial Sequence
 FEATURE:
 OTHER INFORMATION: Chemically synthesized peptide motif
 US-10-989-767A-7

Query Match 35.1%; Score 26; DB 6; Length 9;
 Best Local Similarity 80.0%; Pred. No. 1.8e+05;
 Matches 4; Conservative 0; Mismatches 1; Indels 0;
 Gaps 0;
 Qy 1 TPPAY 5
 | | | |
 Db 5 TPPYV 9

RESULT 20
 US-10-989-767A-74
 Sequence 74, Application US/10989767A
 Publication No. US20060018917A1
 GENERAL INFORMATION:
 APPLICANT: PARIS, MARY

APPLICANT: HUBERT, RENE
APPLICANT: RAITANG, ARTHUR
APPLICANT: AFAR, DANIEL
APPLICANT: LEVIN, ELANA
APPLICANT: CHALLITA-EID, PIA
APPLICANT: JAKOBOWITZ, AYA

TITLE OF INVENTION: NUCLEIC ACID AND CORRESPONDING PROTEIN NAMED 158P1D7
TITLE OF INVENTION: USEFUL IN THE TREATMENT AND DETECTION OF BLADDER AND OTHER CANCERS

FILE REFERENCE: 511582005004

CURRENT APPLICATION NUMBER: US/10/989,767A

CURRENT FILING DATE: 2004-11-15

PRIOR APPLICATION NUMBER: 10/277,292

PRIOR FILING DATE: 2002-10-21

PRIOR APPLICATION NUMBER: 09/935,430

PRIOR FILING DATE: 2001-08-22

PRIOR APPLICATION NUMBER: 60/227,098

PRIOR FILING DATE: 2000-08-22

PRIOR APPLICATION NUMBER: 60/282,739

PRIOR FILING DATE: 2001-04-10

NUMBER OF SEQ ID NOS: 700

SOFTWARE: PatentIn Ver. 2.1

SEQ ID NO: 74

LENGTH: 10

TYPE: PRT

ORGANISM: Artificial Sequence

FEATURE: OTHER INFORMATION: Chemically synthesized peptide motif

US-10-989-767A-74

Query Match 35.1%; Score 26; DB 6; Length 10;
Best Local Similarity 80.0%; Pred. No. 2.4e+02;
Matches 4; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 1 TPPAY 5
| | |
Db 6 TPPVY 10

Search completed: April 19, 2006, 19:36:48
Job time : 29 secs